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The objective of the Emergency Episode Plan is to prevent the occurrence of adverse pollutant levels and is designed for the emergency control of the following pollutants: total suspended particulates; oxides of sulfur, carbon monoxide, oxides of nitrogen, photochemical oxidants, and total hydrocarbons. The plan is viewed as a mechanism for reducing high pollution levels by reducing source emissions in a well-structured manner. It is definitive with regard to sources in existence at the date of promulgation. The plan defines measures to be taken by designated agencies and officials of the State of Alabama and cooperating organizations for protection of the health of persons during air pollution episodes. An episode communications manual is included as an appendix to this plan.

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PROPOSED EMERGENCY EPISODE PLAN
FOR THE
STATE OF ALABAMA

November 1971

Prepared For

Environmental Protection Agency
Office of Air Programs

TRW
SYSTEMS GROUP
WASHINGTON OPERATIONS

PREFACE

In developing the Proposed Permit System, Proposed Air Quality Surveillance System, Proposed Emergency Episode Plan, and Proposed Control Strategy portions of the Alabama Implementation Plan, TRW Systems Group has been guided by the intent of the Federal Register, August 14, 1971, as well as extensive direct communication with Environmental Protection Agency and Alabama Division of Air Pollution Control personnel.

We are particularly indebted to Barry Gilbert and William Burch of the Region IV Office, EPA, and William Willis, John Daniel, and Cecil Cork of the Alabama Division of Air Pollution Control for their overall guidance on this project.

A large number of TRW people participated in this project; those with the most direct involvement are listed below.

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1.0 EPISODE COMMUNICATIONS MANUAL A-1

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1.0 INTRODUCTION

The Emergency Episode Plan for the State of Alabama is developed in accordance with Chapter IV, Title 42, Code of Federal Regulations, §420.16 entitled, "Prevention of Air Pollution Emergency Episodes." An air pollution episode defined as an atmospheric condition in which ambient concentrations of airborne contaminants tend toward levels that imminently and substantially endanger the health of persons who are exposed to the air, or in which the state of the atmosphere, usually attended by stagnant air masses and light winds, is conducive to the accumulation of air contaminants and their potential increase in concentration.

The objective of this plan is to prevent the occurrence of adverse pollutant levels and is designed for the emergency control of the following pollutants.

- Total suspended particulates (TSP)
- Oxides of sulfur, expressed in terms of sulfur dioxide (SO_2)
- Carbon monoxide (CO)
- Oxides of nitrogen expressed in terms of nitrogen dioxide (NO_2)
- Photochemical oxidants, ozone and others (Ox)
- Total hydrocarbons including other organics such as aldehydes, ketones, aromatics, aliphatics, etc. (HC).

The plan is viewed as a mechanism for reducing high pollution levels by reducing source emissions in a well-structured manner. It is definitive with regard to sources in existence at the date of promulgation. Updating of the plan will be required periodically as significant changes in source emissions or air quality are recorded.

The plan defines the measures to be taken by designated agencies and officials of the State of Alabama and cooperating organizations for protection of the health of persons during air pollution episodes.

Since episodes are problems that usually extend beyond political jurisdictions, cooperation with the neighboring states of Mississippi, Georgia, Tennessee, and Florida will be mandatory. Accordingly, this plan is formulated as a logical outgrowth of plans for the four intrastate and three interstate Air Quality Control Regions developed under the Air Quality Act of 1967. In the interests of continuity and effective implementation, the plan incorporates general recommendations for interstate coordination, particularly with regard to episode criteria.

An Episode Communications Manual is included as Appendix A to this plan. This manual defines the communications operation procedures to be utilized during an air pollution episode.

2.0 LEGAL AUTHORITY

The action provided for in the Emergency Episode Plan is authorized by Act No. 769, 1971, Regular Session of the Alabama Legislature. This legislation expresses the "intent of the Alabama Legislature in preventing or reducing the severity of air pollution disasters that affect the health of people who are exposed to contaminated air." In general, the legislation (a) states the intent of the Alabama Legislature to assign responsibilities for episode avoidance, and (b) conveys specific powers to those so designated for carrying out their responsibilities in the most effective manner.

2.1 ASSIGNMENT OF RESPONSIBILITIES

The following excerpts from the above legislation cite the assignment of responsibilities.

- Identification of enforcement authority, the Director of the Division of Air Pollution Control, Department of Public Health, State of Alabama, as the responsible person for carrying out emergency functions. (Section 11, ibid.)
- Delineation of the area of jurisdiction. (Section 11, ibid.)
- Basis upon which emergency actions will be initiated. (Section 5(d), ibid.)
- Manner in which the specific orders are to be issued and the time period of action. (Section 11, ibid.)
- Responsibility for development of an Emergency Control Action Plan prescribing specific measures for the major sources of emissions. (Section 5(d), ibid.)
- Responsibility for an evaluation of the preventive and abatement actions taken during an episode. (Section 11, ibid.)

2.2 CONVEYANCE OF SPECIFIC POWERS

The following excerpts from the above legislation cite the conveyance of specific powers.

- To control and prevent conditions which threaten or endanger the public health or welfare before the occurrence of actual injury. (Section 11, ibid.)

- To enforce the law by appropriate administrative and judicial proceedings, including injunctive relief. (Sections 6(b), 17(a) and (j), ibid.)
- To gain access to records relating to emissions of air contaminants. (Sections 5(f), 6(c), and 7, ibid.)
- To secure necessary technical information by contract or otherwise. (Section 6(d), ibid.)
- To prepare comprehensive plans for the control of air pollution. (Section 6(e), ibid.)
- To collect and disseminate information concerning air pollution, including air quality and emission data, conduct and results of studies, on-site investigations, and research. (Sections 6(g) and (j) and 14, ibid.)
- To establish ambient air quality standards and emission standards for all parts of the State of Alabama. (Sections 5(a) and (b) and 10, ibid.)
- To exercise emergency authority to limit or eliminate emissions with minimum delay. (Sections 5(d) and 11, ibid.)
- To impose penalties for failure to comply with regulations, in particular, with legally authorized action under emergency conditions. (Section 17(a), ibid.)
- To delegate performance of duties to a subordinate agency. (Section 6(n), ibid.)
- To take any action deemed necessary to carry out statute and regulations. (Section 6(b), ibid.)
- To advise, consult, cooperate, and enter into agreements with the governments and agencies of adjacent states or any interstate or regional agency representing any such state or political subdivision (Section 6(k), ibid.)

3.0 EPISODE CRITERIA

This section of the plan defines the criteria for establishing the operating modes within the Division of Air Pollution Control during an air pollution episode and distinguishes between the various types of episode situations.

3.1 OPERATING MODE CRITERIA

A four-stage set of criteria is used to define degrees of severity in episode conditions which set in motion pre-planned control processes for the reduction of pollutants. The example Environmental Protection Agency criteria published in the Federal Register, Vol. 36, No. 206, October 23, 1971, page 20513, are adopted for the State of Alabama.

3.1.1 First Stage: Episode Watch

An Episode Watch is an internal operating mode within the Division of Air Pollution Control in which surveillance is extended up to 24 hours per day in anticipation of higher than normal pollutant levels. Emission curtailment is usually not required during this stage; however, notification is given to news media and selected sources to facilitate advance preparation and voluntary curtailment where advisable.

The declaration of an Episode Watch is initiated by one or more of the following events:

- An Atmospheric Stagnation Advisory issued by the National Weather Service, stating that atmospheric conditions marked by a slow moving high pressure system, light winds, and temperature inversions are expected to affect the State of Alabama or a portion thereof for the next 36 hours. In effect, the advisory cautions of pollutant concentration buildups if large amounts of emissions are present.
- A forecast by local meteorologists that stagnant atmospheric conditions, as described above, could result in high air pollutant levels in Alabama or a portion thereof.

- Validation of abnormally high air pollution measurements reports, for at least three consecutive hours, at a given locality in Alabama; specifically, measurements reaching or exceeding 50 percent of the Alert level (3.1.2).

3.1.2 Second Stage: Alert

The Alert level marks the threshold at which selective control action is begun. An Alert status will be declared when any one of the following pollutant concentrations is measured at any station, and, due to adverse meteorological conditions, can be expected to remain at these levels or higher for the next twelve hours or more unless control measures are taken. If persistence for the next twelve hours is not indicated, the Episode Watch will be in effect. The following are Alert criteria[1]:

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.30 ppm (800 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 3.0 COHs per 1000 linear feet

or measured by Hi Vol (high volume sampler), 24-hour accumulation:

24-hour average, 375 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 0.2

sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 65,000

Carbon Monoxide Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 15 ppm (17 mg/m^3)

---

[1] Conversion factors from ppm to $\mu g/m^3$ for each pollutant are taken from tables in the Federal Register, of August 14, 1971.

SO_2 - 1.0 ppm = 2620 $\mu g/m^3$

NO_2 - 1.0 ppm = 1880 $\mu g/m^3$

CO - 1.0 ppm = 1160 mg/m^3

Oxidants - 1.0 ppm = 2000 $\mu g/m^3$

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average, 0.15 ppm (282 $\mu g/m^3$)

or 1-hour average, 0.6 ppm (1130 $\mu g/m^3$)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer or equivalent.

1-hour average, 0.1 ppm (200 $\mu g/m^3$)

3.1.3 Third Stage: Warning

The Warning level marks the threshold of a preliminary health hazard which requires the curtailment of certain industrial activities in accordance with a prearranged schedule. Continued deterioration of air quality to the point where a warning level concentration is reported at one or more monitoring sites will result in the declaration of a Warning status, based on the official weather prediction that no significant improvement in air quality is expected for the next twelve hours unless control measures are taken. The following are Warning criteria:

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.6 ppm (1600 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 5.0 COHs per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation:

24-hour average, 625 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations:

sulfur dioxide, ppm, times particulates, COHs, equals 0.8

or sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 261,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 30 ppm (34 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average, 0.30 ppm (565 μg/m^3)

1-hour average, 1.20 ppm (2260 μg/m^3)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.40 ppm (800 μg/m^3)

3.1.4 Fourth Stage: Emergency

The Emergency level defines the high threshold of air pollution which is of significant harm to the health of persons, therefore requiring that the most stringent control actions be taken. If preventive measures fail to avert this condition, all activities that produce emissions may be subject to major curtailment, in accordance with a prearranged schedule. An Emergency status will be declared if any of the following ambient pollutant concentrations are reached or exceeded, and if the official weather prediction indicates that no significant improvement in air quality is expected for the next twelve hours unless stringent control measures are taken.

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.8 ppm (2100 μg/m^3)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 7.0 COHs per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation:

24-hour average, 875 μg/m^3

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 1.2

or

sulfur dioxide, μg/m^3, times particulates, equals 393,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 40 ppm (46 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average, 0.40 ppm (750 μg/m^3)

1-hour average, 1.60 ppm (3000 μg/m^3)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.60 ppm (1200 μg/m^3)

3.2 EPISODE STAGE TERMINATION

When conditions for a declared episode status are no longer met, termination of that particular status will be declared. Specifically:

a. When ambient pollutant concentrations fall below the critical levels for the stage, and a downward trend of concentrations is established; and

b. When meteorological conditions that attended the high concentrations are no longer called for in official weather predictions.

A public declaration will take one of the following forms:

- Terminate "Emergency Status", resume "Warning Status" or "Alert Status"; whichever is appropriate.
- Terminate "Warning Status", resume "Alert Status" or appropriate stage.
- Terminate "Episode Status".

Upon termination of an "Episode Status", the Division of Air Pollution Control will remain on internal "Episode Watch" until a return to normal operation is announced by the Division Director.

3.3 EPISODE STATUS DECLARATION AUTHORITY

Announcement of an internal Episode Watch, and public declarations of Alert Status, Warning Status, Emergency Status and terminations thereof shall be made by the Director, Division of Air Pollution Control.

3.4 EPISODE SITUATIONS

Episode conditions may be caused by a specific pollutant or a combination of pollutants and may affect a specific locality or a wide general area. When an episode situation occurs, remedial measures are directed primarily at the major point sources of the specific pollutant(s) for which episode levels are observed or predicted. In order to minimize disruption to the economic life of the community, as a whole, this episode plan defines special episode criteria that enables control to be applied with a high degree of selectivity. For example, if carbon monoxide concentrations are at the warning level in a downtown area, but other pollutant concentrations are well under their respective alert levels, it will only be necessary for emitters of the carbon monoxide pollutants to curtail activity.[2]

The emission reduction measures have been designed to lower ambient pollutant concentrations by deferring to extreme emergency situations any actions that could result in irreparable damage to plant equipment and facilities, or that might result in substantially higher rather than lower emissions during shutdown operations. For example, complete shutdown of a brick manufacturing plant, which requires from 12 to 24 hours, must be accomplished with due care for the refractory lining of the kilns. However, a significant percentage reduction of particulate emissions can be achieved within the first three hours of an episode if a new batch is not begun. Industries that require a long time for shutdown will be notified during the Episode Watch period to enable them to prepare for possible curtailment of operations.

3.4.1 The Specific Pollutant Situation

If concentrations measured for one or two pollutants reach or exceed the criteria levels defined in Sections 3.1.2, 3.1.3, and 3.1.4 but concentrations of other pollutants remain substantially below 50 percent of alert levels, and no improvement in weather conditions is expected, a specific alert, warning, or emergency status may be declared naming the pollutant(s) that meet these respective criteria. If concentrations of two such pollutants meet different criteria, the declared status for the episode shall be the higher of the two. A declaration shall state that an Episode Watch is being maintained on the remaining pollutants. For example, consider the following one-hour concentration values: sulfur dioxide, 0.05 ppm; particulates, 0.5 COHs; nitrogen dioxide, 0.06 ppm; carbon monoxide, 42 ppm (Warning level, 40 ppm); photochemical oxidants, 0.12 ppm (Alert level, 0.10 ppm). If meteorological conditions are met, a declaration will be issued stating that a specific warning status exists for carbon monoxide and oxidants, while an Episode Watch is in effect for sulfur dioxide, particulates, and nitrogen dioxide.

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[2] The Director, Division of Air Pollution Control, may elect the application of a more stringent control to a given situation when deteriorating meteorological conditions are forecast.

Remedial measures for specific pollutants are detailed in Section 4.2 of this plan.

3.4.2 The General Episode Situation

The ambient concentrations of three or more pollutants simultaneously reaching or exceeding their respective episode criteria describes a general episode situation. Situations of this type tend to occur less frequently than the specific pollutant situation.

Remedial measures for the general episode situation are detailed in Section 4.3 of this plan.

3.4.3 The Local Situation

If high concentrations of one or more pollutants are measured at one of the monitoring sites but not at the others, and the effect is known or suspected to originate from an identifiable source near the given monitoring site, a declaration may be made stating that a "local" or emergency status exists for the delineated area, and that an Episode Watch is in effect over the remaining portion of the jurisdictional area. The affected portion of the State of Alabama will be specified by the Director, Division of Air Pollution Control, on the basis of air quality and meteorological reports and predictions.

A condition for declaration of a local episode (alert, warning, or emergency status) is that meteorological conditions favor the maintenance or increase of high concentrations for at least a twelve-hour period. The local episode is, therefore, a special case of what shall be termed "Accidental Episode for Common Pollutants." This type of accidental episode may result from control equipment malfunction at a nearby major source, or other unauthorized release of abnormal amounts of pollutants. Normally, the term "Accidential Episode" denotes the accidental release of airborne hazardous material used in an industrial process (chlorine, ammonia, etc.), whether at a plant or in transit. A separate manual on Accidental Episodes may be issued by the Environmental Protection Agency in 1972.

Emission reduction will be focused upon the identified source or sources of excess emissions. The procedure will be to shut down the operation from which the emission results, and to repair the equipment or alter the process as required to restore normal operation.

The corresponding general measures for the identified pollutant(s) will be applied within the delineated area where a local alert, warning, or emergency status is in effect.

3.4.4 The Regional Situation

A regional situation may be defined as an urban area or an isolated source in a non-urban area in which a pollutant(s) has reached a level(s) of concentration which poses a potential hazard to human life and health. Episode conditions within these areas may be limited to one individual pollutant.

3.5 EPISODE POTENTIAL AREAS

Available air quality data throughout the State of Alabama indicates that an episode potential exists in the following urban areas:

- Birmingham - Fairfield
- Mobile - Salco

- Gadsden
- Childersburg
- Florence - Sheffield - Tuscumbia
- Huntsville
- Montgomery

Episodes that are attributable to a known, isolated source may also occur in several non-urban areas, such as the Tennessee Valley area near the TVA's Widows Creek Power Plant.

Tables 3-1a, 3-1b, and 3-1c list the sources and their respective pollutants in Alabama. Included in the tables are the:

- Region and county location of the source
- Source name
- Contact and telephone number
- Reference symbols for the action to be taken under the Specific Episode Emission Reduction Plan
- Number of hours to achieve emission reductions of 33%, 67%, and 95% or more
- Reference symbols for the action to be taken under the General Episode Emission Reduction Plan
- Reference symbols for the action, if any, to be taken during an Episode Watch (Episode Preparatory Measures).

The reference symbols used in these tables are defined in Table 3-2 and refer to the applicable emission reduction measures that are detailed in Section 4.0.

One may note, by reading across a line in Table 3-1, which specific pollutant episode plans apply to each particular source. By reading down the appropriate pollutant column, one may determine all major sources for which specific pollutant emission reduction is indicated within a given episode area.

Table 3-3 lists the areas, specific pollutants, and the most significant local episode sources for which detailed episode plans have been developed within the State of Alabama. The remaining portion of the state is also covered by the same episode plan provisions in the event that a large-scale episode occurs.

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
002	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
MONTGOMERY	MONTGOMERY AREA												
	Excelsior Brick			I					I		3	8	4
	Jenkins Brick			I					I		3	8	4

Table 3-1a. SOURCES (>1000 tons/year) AND RESPECTIVE POLLUTANTS

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
003	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
ETOWAH	GADSDEN AREA												
	Goodyear Tire	J.R. Burton, Jr		B						B	<1	<1	<1
	Alabama Power	F.L. Clayton	(205) 323-5341	A					A	A	1	1.5	2
	Vulcan Materials	Howard Kay	547-6925	N						N	<1	<1	<1
	Republic Steel	J.D. Hilleke	546-3361	P					P	P	2	6	14
TALLADEGA	TALLADEGA AREA												
	Beaunit Fibers	H. Reynolds	(205) 378-2211	B4									
	Kimberly-Clark	H.A. Neubaner	378-2711	J						J	3	6	12
	Talladega Materials	G.M. Limbaugh	378-6170	N						N	<1	<1	<1
	Moretti-Harrah Marble	R.L. Wilkins	249-0102	N						N	<1	<1	<1
	Alabama Calcium	K.E. Hyatt	245-3231	N									

Table 3-1a. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
004	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
JEFFERSON	BIRMINGHAM AREA												
	McWane Cast Iron Pipe	S.P. Teague	322-3521			D2				D2	1	1.5	2
	Lone Star Cement	J. Anthony	841-2777	M					M	M	4	18	48
	Birmingham Stove & Range	S. Jones	322-0371			D2				D2	1	1.5	48
	Wade Sand and Gravel	R.A. Wade	322-4611	N						N	<1	<1	<1
	Conners Steel	H.T. Montgomery	592-8981	D3		D3				D3	1	1.5	2
	Southern Electric Steel	R.W. Scholl	324-5561	D3		D3				D3	1	1.5	2
	Alpha Portland Cement	W.E. Ellis	785-0028	M					M	M	4	18	48
	American Cast Iron Pipe	C.P. Farlow	323-8061	D1		D1 D4				D1	2 1	6 1.5	14 2
	Harbison-Walker	T.A. Mune	788-6789	O						O	1	1.5	2
	Vulcan Materials	R.M. Steward	879-0421	N						N	<1	<1	<1
	Jefferson Foundry	J. Atkinson	595-8444			D2				D2	1	1.5	2
	Alabama By-Products	H.J. Hager	252-5171	P	P		P	P	P	P	2	6	14
	Republic Steel	J.D. Hilleke	546-3361	D1		D1			D1	D1	2	6	14
	U.S. Pipe-Bessemer	R. Bates Wilson	251-3161	D1		D1			D1	D1	2	6	14
	U.S. Pipe-N. Birmingham	R. Bates Wilson	251-3161	D1		D1			D1	D1	2	6	14

Table 3-1a. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
004	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
JEFFERSON	BIRMINGHAM AREA												
	U.S. Pipe, Mining, Metals	R. Bates Wilson	251-3161	D1	D1			D1	D1	D1	2	6	14
	Woodward Iron	H.S. Savage, Jr	428-1241	B4	B4		B4			B4	<1	<1	<1
	Woodward Iron By-Product	H.S. Savage, Jr	428-1241		B1					B1	1	2	3
	U.S. Steel, Fairfield	J.C. Davis	783-2201	B,P C1				P	P	P	2 12		
	U.S. Steel, Ensley	J.C. Davis	783-2201	C3		C3			C3	C3			
	U.S. Steel, Wenonah	J.C. Davis	783-2201	C4						C4			
	Mulga Mine	W.W. Jones	428-1241					N		N			
	Standard Oil - Birmingham							V		V			
	Lehigh Portland Cement Co	K.J. Schatzlein	434-6171	M									

Table 3-1a. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
005	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
MOBILE	MOBILE AREA												
	Scott Paper	J.H. Coil, Jr	433-0581	J				J	J	J	3	6	12
	International Paper	P. Livingston	457-8911		J			J	J	J	2	6	12
	Stauffer Chem-LeMoyne	J. Redden	657-1310		R				R	R	3	6	12
	Courtaulds North Am.	V.E. Baker	(205) 675-1710		Q				Q	Q	2	5	10
	Ideal Cement	J.A. Bozeman	432-8631	N						N	<1	<1	<1
	Airco Alloys & Carbide	Datsman	(205) 661-4771	G						G	1.5	3	6
	Alum. Co. of Am. (Alcoa)	R.V. Newsome	432-1881	N						N	1	2	3
	Alabama Power-Chickasaw	B.B. Keeler	452-0431		A			A	A	A	1	2	4
	Hess Oil	H.W. Duck	438-3515					V		V	1	1.5	2
	Mobile Dock	R.M. Hope	438-2481					V		V	1	1.5	2
	Alabama Power - Barry	F.L. Clayton, Jr	323-5341 ext 2400	A1									
ESCAMBIA	BREWTON AREA												
	Container Corp - Brewton	G.W. Whiteside	867-3621	JSM									

Table 3-1a. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
007	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
COLBERT	FLORENCE-SHEFFIELD AREA												
	TVA - Colbert	F.E. Gartrell	(615) 755-2002	A	A	A	A		A	A	2	6	24
	TVA - Muscle Shoals	F.E. Gartrell	(615) 755-2002	T					T	T	2	6	24
	Reynolds Metal	G.F. Bradley	(205) 383-7141					F2	F2	F2	10	24	120
MADISON	HUNTSVILLE AREA												
	General Automotive					W	W			W	2	4	6
	Madison Limestone-Huntsville	W.E. McDonald	539-2153	N									
	Madison City Airport					W							
	General Shale Products Corp.	B.O. Quinn	883-1490	I									

Table 3-1a. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
001	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
CHOCTAW	BUTLER AREA												
	American Can - Naheola Mill	George Wagner	654-2421	J	J	J			J	J	3	6	12
DALLAS	SELMA AREA												
	Alabama	A.L. Ascik	872-3491	G					G		2.5	5	8
	Hammermill Paper	O.A. Marrow	872-3481	J	J	J			J		3	6	12
MARENGO	DEMOPOLIS AREA												
	Gulf States Paper	R.L. Yoder	553-6200	J		J			J		3	6	12
	Lone Star Cement	L.K. Schlumbrecht	289-0243	N									
WASHINGTON	McINTOSH AREA												
	Alabama Electric Corp.	C.R. Lowman	222-1191	A	A				A		1	2	4
WILCOX	PINE HILL AREA												
	Macmillan Bloedel	A.J. Gardner	963-4390			J			J		3	6	12

Table 3-1b. LOCAL EPISODE SOURCES AND RESPECTIVE POLLUTANTS

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
001	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
CLARKE	JACKSON AREA												
	Allied Paper	J.O. Sparks	246-4461	XJ	J	J	J						

Table 3-1b. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
002	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
AUTAUGA	PRATTVILLE AREA												
	Union Camp	Wyatt Shorter	365-8841	J		J			J		3	6	12
LEE	AUBURN AREA												
	Auburn Stone	Herman Genet	887-5037	N							<1	<1	<1

Table 3-1b. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
004	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
GREENE	DEMOPOLIS AREA												
	Alabama Power	F.L. Clayton Jr.	323-5341 ext 2400	A	A		A	A	A	A	1	15	2
PICKINS	REFORM AREA												
	Southern Natural Gas	Victor Harbon Jr	328-5410				U	U			<1	<1	<1
SHELBY	COLUMBIANA AREA												
	Southern Electric	W.H. Gray	323-5341 ext 2504	A	A		A	A	A	A	1	2	4
	Southern Cement	W.H. Remele	324-5651	M					M		4	18	48
	Longview Lime	Harold E. Middleton	663-0768	M					M		4	18	48
TUSCALOOSA	TUSCALOOSA AREA												
	Gulf States Paper	Robert R. Fuller	553-6200	J		J					3	6	12
	Central Foundry	J.H. Witherspoon	553-6810	D1		D1			D1		2	5	10

Table 3-1b. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
004	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
WALKER	GORGAS AREA												
	Alabama Power	F.L. Clayton Jr.	323-5341 ext 2400	A	A		A		A	A	1	2	4

Table 3-1b. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
006	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
GENEVA	HARTFORD AREA												
	Southeastern Gypsum Co.	M.W. Morritt	588-3210	X									

Table 3-1b. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
007	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
JACKSON	SCOTSBORO AREA												
	TVA - Widows Creek			A	A		A	A	A	A	2.5	5	8
MORGAN	DECATUR AREA												
	Monsanto			P B						P	2 1	6 1.5	14 2
	Conagla						B				1	1.5	2

Table 3-1b. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
002	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
MONTGOMERY	MONTGOMERY AREA												
	Cities Service Co.	A. V. Reid	263-3449	B3,V									
	Deep South Construction Co.	N. Rotchschild	272-0752	K									
	Brockway Glass Co.	R. J. Ryder	261-5358	X									
	Dannelly Field			W									
	Maxwell AFB			X									

Table 3-1c. SOURCES (100 - 1000 tons/year) AND RESPECTIVE POLLUTANTS

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
003	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox·	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
ETOWAH	GADSDEN AREA												
	Vulcan Materials Co.	J. Greco	492-4610	N									
	American Material & Supply Co.	E. Ellis	547-6323	K									
	AAA Plumbing Pottery Co.	R. T. Fesler	538-7804	0									

Table 3-1c. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
004	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
JEFFERSON	BIRMINGHAM AREA												
	Southern Ready Mix, Inc.	L.C. Weaver	592-8121	[illegible]									
	McQueen Foundry & Supply Co.	C.D. McQueen	592-7412			D2							
	Rock Wool Mfg. Co.	G.C. Cusick	699-6121	X									
	Cosper Foundry, Inc.	R. Martin, Jr.	252-3834			D2							
	Fairmont Foundry Co., Inc.	W.L. Powell, Jr.	841-6472			D2							
	Hayes International Co.	C.B. Reymann	592-0011		B4								
	Interstate Lead Co., Inc.	C.H. Middleton	699-6171	D2,D4	D2,D4								
	Clow Corporation	R.A. Varin	841-2721			D2							
	Stockham Valves & Fittings	C.P. McClinton	592-6361	D2		D2							
	Mobil Chemical Co.	E.N. Mortenson	431-2789		R								
	Jones Foundry Co., Inc.	J.W. Moore	428-2303			D2							
	Griffin Wheel Co.	L.H. Scheiblauer	428-9313	D3									
	Hercules Inc.	W.E. Elston	428-2391				R						
	U.S. Gypsum Co.	D.E. Johnson	841-5512	X									
	Lawler Machine & Foundry Co.	B.A. Louden	595-0595			D2							

Table 3-1c. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
004	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
JEFFERSON	BIRMINGHAM AREA												
	W.A. Belcher Lumber Co.	J.R. Abernathy	787-4626	S			S						
	Universal Atlas Cement	H.L. Rader	699-2931	M									
	E.I. DuPont de Nemours	H.S. Wasley	674-9436	X	X		X						
	McWane Cast Iron Pipe	S.P. Teague	322-3521										
	Birmingham Stove & Range	S. Jones	322-0371	D2									
	W.J. Bullock, Inc.	E.A. Binney	788-6586	E	E								
	Vulcan Asphalt	R.M. Stewart	879-0421					V					
	Warrior Asphalt	L.M. Williams	553-6722					V					
	Phillips 66							V					
	Texaco							V					
	Union 76							V					
	Standard Oil							V					
	Shell Oil							V					
	Triangle Ref-Birmport							V					
	Humble Oil							V					

Table 3-1c. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
004	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
JEFFERSON	BIRMINGHAM AREA												
	Crown Central							V					
	Cities Service							V					
	Marathon Oil							V					
	American Oil							V					
	Jefferson Foundry	J. Atkinson	595-8444	D2									
	Alabama By-Products	H.J. Hager	252-5171			P							
	Republic Steel	J.D. Hilleke	546-3361			P							
	U.S. Pipe, Mining Metals	R. Bates Wilson	251-3161			D1							

Table 3-1c. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
005	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
MOBILE	MOBILE AREA												
	Horace S. Turner, Jr., Inc.	Horace Turner	473-4451					V					
	Standard Furniture Mfg. Co.	J.H. Stuckey	937-2451					L					
	American Cyanamid Co.	L.D. Placido	457-6601		R								
	Stauffer Chemical - Bucks	G.A. Burke	675-0950		X								
	National Gypsum Co.	J.H. Collie	433-3971		L								
	Ala. Drydock & Shipbuilding	G.C. Ball	438-6041		B5								
	Standard Oil							V					
	Alabama Refinery							V					
	La Gloria							V					
	Triangle Ref-Choctaw							V					
	Triangle Ref-Blakeley							V					
	American Oil							V					
	Murphy Oil							V					
	Bates Field				W			W					
	Container Corp.	G.H. Whiteside	867-3621		SJ			SJ					

Table 3-1c. (continued)

REGION AND COUNTY	AREA	CONTACT NAME OR TITLE	TEL.	EPISODE PLAN FOR SPECIFIC POLLUTANT					ALSO CONTACT FOR:		HOURS REQUIRED FOR EMISSION REDUCTION		
007	NAME OF SOURCE			TSP	SO_2	CO	NO_2	Ox	EPISODE WATCH	GENERAL EPISODE	33% Red.	67% Red.	+95% Red.
COLBERT	FLORENCE-SHEFFIELD AREA												
	Reynolds Metals-Sheffield	J.L. Hicks	383-7150			S	F2						
	Cornelius Lumber Co.	W.D. Cornelius	359-4414			S							
	Ford Motor Co. - Sheffield	F.J. Kallin	(313) 322-0610	F2									
	King Stove & Range Co.	D.G. Willich	383-2421			D2							
	Union Carbide Corp.	R.T. Bilstein	383-1441	D3									
MADISON	HUNTSVILLE AREA												
	Madison County Airport			W									

Table 3-1c. (continued)

Table 3-2. KEY TO TYPE OF SOURCE DESIGNATED BY REFERENCE SYMBOL

Reference System	Type of Source
A.	Power Plant: public utility, boiler
A1	Coal only
A2	Coal and oil and/or gas
B.	Private Facility: boiler for power, heat, and/or hot water
B1	Coal only
B2	Oil only
B3	Gas only
B4	Coal and oil and/or gas
B5	Oil and gas
C.	Integrated Iron and Steel: processes
C1	Open hearth furnace
C2	Electric arc furnace
C3	Blast furnace
C4	Sintering
D.	Secondary Ferrous: processes
D1	Cupola, large
D2	Cupola, medium or small
D3	Electric arc furnace
D4	Reverberatory or other furnace
E.	Non-Ferrous, Smelter
F.	Non-Ferrous, Secondary
F1	Cupola
F2	Reverberatory or other furnace
G.	Electro-Metals and Refractories
H.	Primary Aluminum: processes
I.	Brick Manufacturing
J.	Pulp Mill: processes

Table 3-2. (continued)

Reference System	Type of Source
K.	Asphalt Batching
L.	Lumber and Wood Products
M.	Cement Manufacturing, Lime Kilns
N.	Stone, Coal, Mineral, Sand: crushing, mixing, cleaning, conveying, transfer
O.	Clay: processes
P.	Coking
Q.	Plastics
R.	Sulfuric Acid Manufacturing
S.	Incineration
T.	Fertilizer Plant
U.	Natural Gas Plant
V.	Oil and Gasoline Storage
W.	Transportation
X.	Other

Table 3-3. EPISODE PLANS IN EFFECT

	Specific Episode Plan					General Episode Plan	Source
AREA	TSP	SO_2	NO_2	CO	Ox		
Birmingham	X	X	X	X	X	X	
Mobile	X	X		X	X	X	
Gadsden	X	X				+	
Talladega	X	X		X		X	
Florence/Sheffield	X	X	X	X	X	X	
Huntsville			X	X	X	X	
Local Episodes (Counties):							
Choctaw	X	X		X		X	American Can
Dallas	X						Alabama Met. and Hammermill
		X		X		X	Hammermill
Marengo	X			X			Lone Star Cement
Washington	X	X					Alabama Power
Wilcox				X			Macmillan
Autuga	X			X			Union Camp
Montgomery	X						Excelsior Brick and Jenkins Brick
Bullock	X						Auburn Stone
Greene	X	X	X		X	X	Alabama Power
Shelby	X						Southern Cement Longview Cement and Southern Electric
		X	X		X	X	Southern Electric
Tuscaloosa	X			X			Gulf States Pulp and Central Foundry
Walker	X	X	X			X	Alabama Power
Pickens			X		X		Southern Natural Gas
Jackson	X	X	X		X	X	TVA, Widows Creek Plant
Marion	X						Marion Coke
Morgan	X	X	X			X	Monsanto, Conagla

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4.0 EMISSION REDUCTION PLAN

The Emission Reduction Plan specifies the action to be taken by designated agencies and officials of the State of Alabama and cooperating organizations during air pollution episodes. The plan is organized in three parts as follows:

Episode Prepatory Measures - Provides the preparatory measures to be initiated during an Episode Watch operational mode.

Specific Episode Emission Reduction Plan - Details the activities to be executed during the alert, warning, and emergency operational modes of a specific episode situation.

General Episode Emission Reduction Plan - Stipulates activities to be performed during the alert, warning, and emergency operational modes of a general episode situation.

The instructions for the specific and general episodes are grouped under two subheadings; the first consisting of general measures, the second consisting of the specific source curtailment activities. The latter subheading is a description of emission reduction measures for specific industries or equipment and the instructions are keyed to correspond with the reference symbols in Table 3-1. The key to the reference symbols is provided in Table 3-2.

When an alert, warning, or emergency status is publicly declared, a reduction in emissions will be performed in accordance with the appropriate Emission Reduction Plan described in this section. Responsibility for action to achieve emission reduction in accordance with this plan rests with the owner, manager, and principal operator of the facility, building, or vehicle which is the emission source.

4.1 EPISODE PREPARATORY MEASURES

When the Director, Division of Air Pollution Control, announces an internal Episode Watch he will have designated pollutant sources advised of the impending possibility of emission reduction.[3]

Contacts are to be advised that an Episode Watch is in effect, but no action to reduce emissions is required in accordance with standby plans, except for certain preparatory measures as indicated below:

Public Power Generating Plants

- Contact outside power pools to determine the amount of power available for purchase.
- Be prepared to reduce operation of units that are known to rank high in emissions per kilowatt hour for the specific pollutant that shows high concentrations, and to phase in or increase operation of those that rank lower in this respect.
- Survey the availability of lower-sulfur oil and gas.

Incinerators, Heating Plants, and Batch Processes

- Consider a voluntary slackening of operation if possible.
- Be prepared to handle and store the quantity of refuse that would accumulate in a five-day period by providing sufficient personnel and space for storage and containers (leak-proof metal cans with tight fitting covers or other containers acceptable to Alabama Department of Health).

Industrial Processes Requring Many Hours to Curtail Operations

- Determine what auxiliary processes could be dispensed with voluntarily at this time or mandatorily when a higher episode status is declared.

All Government-owned or Operated Incinerators (municipal, county, etc.)

- The hourly burning rate of refuse shall be reduced by 20 percent of normal capacity.

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[3] The sources with reference symbols listed under the Episode Watch column in Table 3-1 require advance notice because of the long lead time for shutdown.

4.2 SPECIFIC EPISODE EMISSION REDUCTION PLAN

When a specific episode situation occurs, remedial measures are directed primarily to the major point source of the specific pollutant for which episode levels are observed or predicted. However, when large numbers of small emitters are the source of a pollutant within an area, restrictions will be imposed upon the public at large.

In the event that ambient concentrations of two pollutants simultaneously reach or exceed their respective episode criteria, (Sections 2.1.2, 2.1.3, and 2.1.4) and no improvement in meteorological conditions is predicted for the next twelve hours, an alert, warning, or emergency status specific for both pollutants will be declared. If levels correspond to a different episode status for the two pollutants, the declared status will be the higher of the two. Emission reduction plans detailed in this section will be executed for both pollutants at the higher status.

If the action specified for one of the two pollutants could increase rather than decrease emissions of the other pollutant, as with certain fuel-switching measures, it will not be executed. The principle conflict involves heating or power plants in which a switch from coal burning to oil or gas burning to reduce emissions of sulfur oxides and particulates could increase emissions of nitrogen oxides, and vice versa. Action to be taken in these cases are described in Section 4.3, General Episode Emission Reduction Plan.

4.2.1 Total Suspended Particulates (TSP), Alert Status

When the alert status for particulates is declared, the following will be done to reduce emissions of this pollutant.

4.2.1.1 General Measures, Alert Status

1. Solid or liquid waste incineration from office buildings, apartment houses, and other facilities not specifically listed in Table 3-1 shall be accomplished only between noon and 4:00 P.M.; however, voluntary postponement until episode termination is desirable.

2. There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

3. Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and 4:00 P.M.

4. Industrial batch processes and incinerators shall be reduced to 50 percent or less of normal operation and prepared for shutdown.

4.2.1.2 Specific Source Curtailment, Alert Status

Action to reduce particulate emissions will be taken by sources in Table 3-1 identified by a reference symbol in the TSP column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Power Plant

A1. Burning Coal Only

a. Reduce operations to 70 percent of normal load or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area.

d. Purchase power from power pool, if available, or prepare to do so.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Diminish load on coal-firing boilers, take up some or all of the slack on oil- or gas-firing boilers.

b. Increase load at company stations that are outside the episode area, and divert power into the area.

c. Purchase power from power pool, if available, or prepare to do so.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

a. Reduce operations to 70 percent of normal load or less.

b. Reduce steam load demands consistent with continuing operations.

B2. Burning Oil Only

a. Reduce load to 85 percent of normal load or less.

b. Reduce steam load demands consistent with continuing plant operations.

B4. Burning Coal and Oil and/or Gas

a. Diminish load on coal-firing boilers to 50 percent or less of normal load, and take up the slack by increasing use of oil-firing or gas-firing boilers.

C. Integrated Iron and Steel

Prepare to stop slag quenching, incineration and scarfing operations. Prepare to operate coke plant for minimum emissions.

C1. Open hearth furnaces

a. Make no new heats.

b. Ascertain that emission control equipment, if any, is operating at maximum efficiency.

c. Prepare for shutdown of units with no high-efficiency air pollution controls.

C2. Electric arc furnaces

a. Make no new heats.

b. Ascertain that plenum hoods, fans, ducts, and air pollution control equipment, if any, are operating at maximum efficiency.

c. Prepare for shutdown.

C4. Sintering

a. Reduce operation to 50 percent of normal load.

D. Secondary Ferrous

D1. Cupola, large

a. Add no new charges.

b. Prepare to shut down equipment without controls.

c. Switch fuel from coal to oil or gas, if appropriate.

D2. Cupola, medium or small

a. Add no new charges.

b. Prepare to shut down equipment without controls.

c. Switch fuel from coal to oil or gas, if appropriate.

D3. Electric arc furnace

a. Start no new heats.

b. Ascertain that plenum hoods, fans, ducts, and air pollution control equipment, if any, are operating at maximum efficiency.

c. Prepare for shutdown.

D4. Reverberatory or other furnace

a. Start no new heats.

b. Ascertain that plenum hoods, fans, ducts, and air pollution control equipment, if any, are operating at maximum efficiency.

c. Prepare for shutdown.

E. Smelter, Non-Ferrous

a. Add no new charges.

b. Prepare to shut down equipment without controls.

c. Switch fuel from coal to oil or gas, if appropriate.

F. Non-Ferrous, Secondary

a. Switch fuel from coal to oil or gas, if appropriate.

b. Stop all incineration processes (burning cable covering to recover copper, burning battery cases to recover lead, etc.).

c. Add no more charges to furnaces or cupolas.

d. Prepare to shut down uncontrolled furnaces with high emissions.

G. Electro-Metal and Refractories

a. Add no new charges.

b. Prepare to shut down equipment without controls.

H. Primary Aluminum

a. Add no new charges.

b. Curtail high-emission auxiliary processes such as chlorine blowing.

I. Brick Manufacture

a. Start no new batches.

b. Allow processes in operation to phase down.

J. Pulp Mills

a. Start no new batches.

b. Allow processes in operation to phase down.

M. Cement Manufacture, Lime Kilns

a. Start no new batches.

b. Allow processes in operation to phase down.

N. Stone, Coal, Mineral, Sand: crushing, mixing, cleaning, conveying, transfer

a. Reduce to 50 percent of normal operation.

b. Prepare for shutdown.

O. Clay Processes

a. Reduce to 50 percent of normal operation.

b. Prepare for shutdown.

P. Coking

a. Start no new batches.

b. Allow processes in operation to phase down.

Q. Plastics

   a. Start no new batches.

   b. Allow processes in operation to phase down.

T. Fertilizer Manufacture

   a. Start no new batches.

   b. Allow processes in operation to phase down.

4.2.2 Total Suspended Particulates Warning Status

When the warning status for particulates is declared, the following emission reduction actions will be taken.

4.2.2.1 General Measures, Warning Status

1. Solid or liquid waste incineration from office buildings, apartment houses, and other facilities not specifically listed in Table 3-1 shall be postponed until episode termination.
2. There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.
3. Soot blowing or boiler lancing on fuel-burning equipment if required, shall be accomplished only between noon and 4:00 P.M. upon approval of the Director, Division of Air Pollution Control.

4.2.2.2 Specific Source Curtailment, Warning Status

Action to reduce particulate emissions will be taken by sources in Table 3-1 identified by a reference symbol in the TSP column. The following describes the actions required for each corresponding reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

   a. Reduce operations to 50 percent of normal load or less.

   b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

d. Purchase power and power pool.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Switch from coal to oil or gas.

b. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

c. Purchase power from power pool.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

a. Reduce operations to 50 percent of normal load or less.

b. Reduce steam load demands consistent with continuing operations.

B2. Burning Oil Only

a. Reduce load to 70 percent of normal load or less.

b. Reduce steam load demands consistent with continuing plant operations.

B4. Burning Coal and Oil and/or Gas

a. Switch completely from coal to oil or gas.

C. Integrated Iron and Steel

Continue all steps taken during alert status. Increase coking time. Stop slag quenching, incineration, and scarfing.

C1. Open Hearth Furnaces

a. Begin banking operations.

C2. Electric Arc Furnaces

a. Cease operations.

C4. Sintering

   a. Cease operations.

D. Secondary Ferrous

   a. Continue steps taken during alert status.

   b. Shut down furnaces without air cleaners.

   c. Prepare to shut down furnaces without high efficiency controls. Add no more metal. Start no new heats.

E. Smelter, Non-Ferrous

   a. Shut down furnaces without air cleaners.

   b. Begin shutdown of all smelters.

F. Non-Ferrous, Secondary

   a. Shut down furnaces without air cleaners.

   b. Begin shutdown of all smelters.

G. Electro-Metals and Refractories

   a. Begin shutdown

H. Primary Aluminum

   a. Add no new charges to pots.

   b. Cease all auxiliary processes.

I. Brick Manufacture

   a. Continue steps taken during alert status.

J. Pulp Mills

   a. Continue steps taken during alert status.

M. Cement Manufacture, Lime Kilns

   a. Continue steps taken during alert status.

N. Stone, Coal, Mineral, Sand (crushing, mixing, cleaning conveying, and transfer

a. Cease operations.

O. Clay Processes

a. Cease operations.

Q. Plastics

a. Continue steps taken during alert status.

T. Fertilizer Manufacture

a. Continue steps taken during alert status.

4.2.3 Total Suspended Particulates Emergency Status

When the emergency status for particulates is declared, the following emission reduction actions will be taken.

4.2.3.1 General Measures, Emergency Status

1. Incineration of any form of solid or liquid waste shall be prohibited.
2. There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.
3. During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit[4].

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[4] Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

4. During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostates shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions.[4]

5. During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling.[4]

6. All places of employment where larger amounts of power, heat or hot water are used shall immediately suspend such operations. The establishments include:

   - Wholesale and retail laundries and dry cleaning establishments
   - Beauty shops and other users of electrical or gas driers
   - Bakeries of breads, pastries, pizza, etc.
   - Public baths, steam rooms, and heated swimming pools

7. Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

8. All outdoor construction and demolition work will be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

9. All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of particulate emissions to the maximum reasonable extent.

4.2.3.2 Specific Source Curtailment, Emergency Status

Action to reduce particulate emissions will be taken by sources in Table 3-1 identified by a reference symbol in the TSP column. The following describes the action required for each corresponding reference symbol.

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[4] See Footnote 4 on preceding page.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 30 percent of normal load,or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

d. Purchase power from power pool.

e. Reduce line voltage by 8 percent of normal.

A2. Burning Coal and Oil, with or without availability of Gas

a. Operate entirely on oil or gas at 45 percent of normal load, or less

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

d. Purchase power from power pool.

e. Reduce line voltage by 8 percent of normal.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

a. Reduce operations to 30 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

B2. Burning Oil Only

a. Reduce load to 50 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing plant operations.

B4. Burning Coal and Oil and/or Gas

   a. Switch completely from coal to oil or gas and reduce load to 50 percent of normal load, or less.

C. Integrated Iron And Steel

   a. Continue all steps taken during warning status.

   b. Reduce coke operations to a minimum.

   c. Shut down all furnaces without high efficiency controls.

   d. Prepare for shutting down all furnaces. (The furnaces may be kept banked to protect them.)

C4. Sintering

   a. Shut down sintering.

D. Secondary Ferrous

   a. Continue steps taken during warning status.

   b. Shut down furnaces without air cleaners.

   c. Complete shut down of furnaces without high efficiency controls.

E. Smelter, Non-Ferrous

   a. Shut down furnaces without air cleaners.

   b. Complete shutdown of all smelters.

F. Non-Ferrous, Secondary

   a. Shut down furnaces without air cleaners.

   b. Complete shutdown of all smelters.

G. Electro-Metals and Refractories

   a. Continue shutdown

H. Primary Aluminum

   a. Add no new charges to pots.

   b. Cease all auxiliary processes.

I. Brick Manufacture

   a. Shut down.

J. Pulp Mills

  a. Shut down.

M. Cement Manufacture, Lime Kilns

  a. Shut down.

N. Stone, Coal, Mineral, Sand (crushing, mixing, cleaning, conveying, and transfer)

  a. Shut down.

O. Clay Processes

  a. Shut down.

Q. Plastics

  a. Shut down.

T. Fertilizer Manufacture

  a. Shut down

4.2.4 Sulfur Dioxide, Alert Status

When the alert status for sulfur dioxide is declared, the following will be accomplished to reduce emissions of this pollutant.

4.2.4.1 General Measures, Alert Status

1. Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically listed in Table 3-1 shall be accomplished only between noon and 4:00 P.M.; however, voluntary postponement until episode termination is desirable.
2. There shall be no open burning of coal, heavy oil, or other material that could contain sulfur.
3. Boiler lancing, where required, will be limited to between noon and 4:00 P.M.

4.2.4.2 Specific Source Curtailment, Alert Status

Action to reduce sulfur dioxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the SO_2 column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Power Plant

A1. Burning Coal Only

a. Reduce operations to 70 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area.

d. Purchase power from power pool, if available, or prepare to do so.

A2. Burning Coal and Oil, with or without availability of Gas

a. Curtail use of coal-firing boilers, take up some or all of the slack on oil- or gas-firing boilers.

b. Increase load at company stations that are outside the episode area, and divert power into the area.

c. Purchase power from power pool, if available, or prepare to do so.

B. Private Boiler (used for power, heat, and/or hot water

B1. Burning Coal Only

a. Reduce operations to 70 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

B2. Burning Oil Only

a. Reduce load to 75 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing plant operations.

B4. Burning Coal and Oil and/or Gas

a. Diminish load on coal-firing boilers by 50 percent or less of normal load, and take up the slack by increasing use of boilers that burn gas or oil with a sulfur content lower than that of the coal.

C. Integrated Iron and Steel

Prepare to stop slag quenching, incineration, and scarfing operations. Prepare to operate coke plant for minimum emissions.

C4. Sintering

   a. Reduce operation to 30 percent of normal load, or less.

   b. Prepare for shutdown if episode continues or intensifies.

D. Secondary Ferrous

D1. Cupola, large

   a. Add no new charges.

   b. Prepare to shut down equipment without controls.

   c. Switch fuel from coal to low sulfur oil or gas, if appropriate.

E. Smelter, Non-Ferrous

   a. Add no new charges

   b. Prepare to shut down equipment without controls.

   c. Switch fuel from coal to low sulfur oil or gas, if appropriate.

   d. Begin shutdown of sulfide ore smelting processes that do not have a sulfuric acid manufacturing plant.

F. Non-Ferrous, Secondary

   a. Switch fuel from coal to low sulfur oil or gas, if appropriate.

   b. Stop all incineration processes (burning cable covering to recover copper, burning battery cases to recover lead, etc.).

   c. Add no more charges to furnaces or cupolas.

   d. Prepare to shut down uncontrolled furnaces with high emissions.

J. Pulp Mills

   a. Start no new batches.

   b. Allow processes in operation to phase down

P. Coking

   a. Start no new batches.

   b. Allow processes in operation to phase down.

Q. Plastics Manufacturing

a. Start no new batches.

b. Allow processes in operation to phase down.

R. Sulfuric Acid Manufacturing

a. Start no new batches.

b. Allow processes in operation to phase down.

4.2.5 Sulfur Dioxide Warning Status

When the warning status for sulfur dioxide is declared, the following emission reduction actions will be taken.

4.2.5.1 General Measures, Warning Status

1. Solid or liquid waste incineration from office buildings, apartment houses, and industrial facilities not specifically listed in Table 3-1 shall be postponed until episode termination.
2. There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.
3. Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and 4:00 P.M. upon approval of the Director, Division of Air Pollution Control.

4.2.5.2 Specific Source Curtailment, Warning Status

Action to reduce sulfur dioxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the SO_2 column. The following describes the action required for each reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 50 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

d. Purchase power from power pool.

e. Prepare to drop voltage by 5 percent.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Switch completely from coal to low sulfur oil or gas.

b. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

c. Purchase power from power pool.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

a. Reduce operations to 50 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

B2. Burning Oil Only

a. Reduce load to 60 percent of normal load, or less

b. Reduce steam load demands consistent with continuing plant operation.

B4. Burning Coal and Oil and/or Gas

a. Switch completely from coal to low sulfur oil or gas

C. Integrated Iron and Steel

Prepare to stop slag quenching, incineration, and scarfing operations. Prepare to operate coke plant for minimum emissions.

C4. Sintering

a. Cease operations.

D. Secondary Ferrous

a. Continue steps taken during alert status.

b. Prepare to shut down furnaces. Add no more metal. Start no new heats.

E. Smelter, Non-Ferrous

a. Shut down furnaces without air cleaners.

b. Begin shutdown of all smelters.

c. Complete shutdown of all sulfide ore processes that do not have sulfuric acid treatment plants.

F. Non-Ferrous, Secondary

a. Continue steps taken under alert status.

b. Complete shutdown of all high emission furnaces.

c. Prepare to shut down furnaces with lower emission rates and some with controls (crucible, electric; sweating and cupola with controls).

J. Pulp Mill

a. Continue steps taken under alert status.

b. Prepare for plant shutdown.

P. Coking

a. Continue steps taken under alert status.

b. Prepare for plant shutdown.

Q. Plastics Manufacturing

a. Continue steps taken under alert status.

b. Prepare for plant shutdown.

R. Sulfuric Acid Manufacturing

a. Continue steps taken under alert status.

b. Prepare for plant shutdown.

4.2.6 Sulfur Dioxide Emergency Status

When the emergency status for sulfur dioxide is declared, the following emission reduction actions will be taken.

4.2.6.1 General Measures, Emergency Status

1. Incineration of any form of solid or liquid waste shall be prohibited.

2. There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

3. During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including

hospitals, sanatoriums, children's homes, and homes for the aged or infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.[5]

4. During the heating season, heating units in a single-family and small multi-family dwellings (six family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions.[5]

5. During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling.[5]

6. All places of employment where large amounts of power, heat or hot water are used shall immediately suspend such operations. The establishments include:

   - Wholesale and retail laundries and dry cleaning establishments.
   - Beauty shops and other users of electrical or gas driers
   - Bakeries of breads, pastries, pizza, etc.
   - Public baths, steam rooms, and heated swimming pools

7. Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

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[5] Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, evironmental laboratories, cryogenic materials facilities, hazardoux material storages, and meat lockers.

4.2.6.2 Specific Source Curtailment, Emergency Status

Action to reduce sulfur dioxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the SO_2 column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 35 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Continue increased load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

d. Purchase power from power pool as needed.

e. Prepare to drop voltage by an additional 3 percent.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Operate entirely on low sulfur oil or gas at 45 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Continue increased load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

d. Purchase power from power pool as needed.

e. Prepare to drop voltage by an additional 3 percent.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

a. Reduce operations to 35 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

B2. Burning Oil Only

a. Reduce load to 45 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing plant operations.

B4. Burning Coal and Oil and/or Gas

a. Switch completely from coal to oil or gas and reduce load to 45 percent of normal load, or less.

C. Integrated Iron and Steel

a. Continue all steps taken during warning status.

b. Reduce coke operations to a minimum.

c. Complete shutdown of furnaces without high efficiency controls.

C4. Sintering

a. Continue shutdown.

D. Secondary Ferrous

a. Complete shutdown of high emission furnaces.

E. Smelter, Non-Ferrous

a. Complete shutdown.

F. Non-Ferrous, Secondary

a. Complete shutdown.

J. Pulp Mill

a. Complete shutdown

P. Coking

a. Complete shutdown

Q. Plastics Manufacturing

a. Complete shutdown

R. Sulfuric Acid Plant

a. Complete shutdown

4.2.7 Carbon Monoxide Alert Status

When the alert status for carbon monoxide is declared, the following will be accomplished to reduce emissions of this pollutant.

4.2.7.1 General Measures, Alert Status

1. Transit authorities will be advised to operate at peak-hour intervals.
2. An appeal will be made to the public through news media to curtail unnecessary use of private vehicles and to use public transit for local travel. (See Section 5.0.)
3. Sightseeing tours will be cancelled.
4. Operation of government vehicles will be reduced to higher priority needs as defined by officials with the rank of bureau chief or equivalent.
5. The public will be further notified of the normal boundaries of downtown areas where concentrations of carbon monoxide are highest. Advisories will discourage incursions into this area, unless absolutely necessary, for the duration of the episode.

4.2.7.2 Specific Source Curtailment, Alert Status

Action to reduce carbon monoxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the CO column. The following describes the action required for each reference symbol.

A. Public Utility Power Plant

A1. Burning Coal Only

a. Reduce operations to 70 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area.

d. Purchase power from power pool, if available, or prepare to do so.

C. Integrated Iron and Steel

C3. Blast Furnace

a. Add no new charges.

b. Ascertain that equipment is operating at maximum efficiency.

D. Secondary Ferrous

D1. Cupola, large

a. Add no new charges.

b. Prepare to shut down equipment without controls.

c. Switch fuel from coal to oil or gas, if appropriate.

D2. Cupola, medium or small

a. Add no new charges.

b. Prepare to shut down equipment without controls.

c. Switch fuel from coal to oil or gas, if appropriate.

D3. Electric Arc Furnace

a. Start no new heats.

b. Ascertain that plenum hoods, fans, ducts, and air pollution control equipment, if any, are operating at maximum efficiency.

c. Prepare for shutdown.

D4. Reverberatory or other furnace

a. Start no new heats.

b. Ascertain that plenum hoods, fans, ducts, and air pollution control equipment, if any, are operating at maximum efficiency.

c. Prepare for shutdown.

J. Pulp Mills

a. Start no new batches.

b. Allow processes in operation to phase down.

P. Coking

a. Start no new batches.

b. Allow processes in operation to phase down.

S. Incineration

a. Reduce to 50 percent of normal operation.

b. Prepare for shutdown.

W. Transportation

a. Comply with instructions specified under General Measures above.

4.2.8 Carbon Monoxide Warning Status

When the warning status for carbon monoxide is declared, the following emission reduction actions will be taken.

4.2.8.1 General Measures, Warning Status

1. Passenger vehicles entering or operating in the center city area will be restricted to those carrying four or more persons, except for outbound vehicles that have discharged passengers within the restricted area.

   The center city area will be defined by the Director.

2. The public will be notified in advance by news media that no automobile or truck traffic will be permitted within the center city area, as defined, if and when an emergency status for carbon monoxide is declared.

3. Designated principal avenues will be made one-way outbound from the center city area. These shall be designated by the Director.

4. All schools and universities will be closed, and all available school buses will supplement regular public transit buses in accordance with prearranged plans.

5. Two hours after the warning status has been declared with a forecast to continue, all parking meter violations and restrictions to on-street parking will be suspended.

6. Staggered working hours will be in effect in all government offices, state, federal, and municipal and in all private offices which volunteer to do so.

7. Taxi cruising will be prohibited in all parts of the city.

8. All deliveries and refuse collecting will be curtailed.

4.2.8.2 Specific Source Curtailment, Warning Status

Action to reduce carbon monoxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the CO column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 50 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by the Director that meteorological conditions so warrant.

d. Purchase power from power pool.

e. Prepare to reduce voltage by 5 percent.

C. Integrated Iron and Steel

C3. Blast Furnace

a. Allow existing operation to continue toward completion, but add no new charges.

b. Prepare for possible shutdown if an emergency status is declared.

D. Secondary Ferrous

a. Continue steps taken during alert status.

b. Shut down furnace with air cleaner.

c. Prepare to shut down furnaces without high efficiency controls. Add no more metals. Start no new heats.

J. Pulp Mills

a. Continue steps taken during alert status.

b. Prepare for possible shutdown if an emergency status is declared.

P. Coking

a. Continue steps taken during alert status.

b. Prepare for possible shutdown if an emergency status is declared.

S. Incineration

a. Cease operation.

W. Transportation

a. Comply with instructions specified in General Measures above.

4.2.9 Carbon Monoxide Emergency Status

When the emergency status for carbon monoxide is declared, the following emission reduction actions will be taken.

4.2.9.1 General Measures, Emergency Status

1. No automobile or truck traffic will be permitted within the the center city area except for designated emergency vehicles.
2. All unnecessary use of vehicles will be prohibited throughout the remainder of affected urban areas.
3. Idling of vehicle engines while the vehicles are parked will be prohibited.
4. All stores will be closed except for those engaged in the sale of food and medicines.
5. Through bus and truck service will be rerouted to avoid the center city.
6. Scheduled bus service will be curtailed.
7. Scheduled flights originating at Birmingham Airport will be cancelled. Flights scheduled to terminate at Birmingham Airport will be diverted to alternate airports.

4.2.9.2 Specific Source Curtailment, Emergency Status

Action to reduce carbon monoxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the CO column. The following describes the action required for each reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 35 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Purchase power from power pool as needed.

d. Continue increased load at company stations outside the episode area and divert power into the area if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

C. Integrated Iron and Steel

C3. Blast Furnace

a. Bank fires to continue at minimum level of emissios, or shut down if possible.

D. Secondary Ferrous

a. Complete shutdown of high emission furnaces.

J. Pulp Mills

a. Complete shutdown.

P. Coking

a. Complete shutdown.

S. Incineration

a. Complete shutdown.

W. Transportation

a. Comply with instructions specified in General Measures above.

4.2.10 Nitrogen Dioxide Alert Status

When the alert status for nitrogen dioxide is declared, the following will be accomplished to achieve emission reduction of this pollutant.

4.2.10.1 General Measures, Alert Status

1. Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically listed in Table 3-1 shall be accomplished only between noon and 4:00 P.M.; however, voluntary postponement until episode termination is desirable.

2. There shall be no open burning of coal, heavy oil, or other material.

3. Boiler lancing, where required, shall be limited to between noon and 4:00 P.M.

4. The public transportation interests will be notified and requested to plan for measures that will be initiated if the warning status for nitrogen dioxide is declared. Specifically:

    a. Transit authorities will be advised to plan for peak-hour operations.

    b. An appeal will be made to the public through news media to curtail unnecessary use of private vehicles and to use public transit for local travel.

    c. Sightseeing tours will be advised to reduce activity in preparation for possible cancellation.

    d. Operation of government vehicles will be reduced to higher priority needs as defined by officials with the rank of bureau chief or equivalent.

    e. The public will be further notified of the normal boundaries of city downtown areas where concentrations of nitrogen oxides tend to be highest. Advisories will discourage incursions into this area, unless absolutely necessary, for the duration of the episode.

4.2.10.2 Specific Source Curtailment, Alert Status

Action to reduce nitrogen dioxide emission will be taken by sources in Table 3-1 identified by a reference symbol in the NO_2 column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Power Plant

A1. Burning Coal Only

a. Reduce operations to 75 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area.

d. Purchase power from power pool, if available, or prepare to do so.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Do not switch fuels.

b. Reduce coal burning to 80 percent of normal load, or less.

c. Reduce oil and/or gas burning to 70 percent of normal load, or less.

d. Reduce steam load demands consistent with continuing operations.

e. Increase load at company stations that are outside the episode area, and divert power into the area.

f. Purchase power from power pool, if available, or prepare to do so.

B. Private Boiler (used for power, heat, and/or hot water)

B4. Burning Coal and Oil and/or Gas

a. Do not switch fuels.

b. Reduce coal burning to 80 percent of normal load, or less.

c. Reduce oil and/or gas burning to 70 percent of normal load, or less.

d. Reduce steam load demands consistent with continuing operations.

D. Secondary Ferrous

D2. Cupola, medium or small

a. Add no new charges.

b. If alternate fuels are available or in use, do not switch.

c. Prepare to reduce operations further if warning status is declared.

J. Pulp Mills

a. If alternate fuels are available, or in use, do not switch.

b. Start no new batches.

c. Allow processes in operation to phase down.

P. Coking

a. If alternate fuels are available, or in use, do not switch.

b. Start no new batches.

c. Allow processes in operation to phase down.

Q. Plastics

a. If alternate fuels are available, or in use, do not switch.

b. Start no new batches.

c. Allow processes in operation to phase down.

U. Public Utility Burning Only Gas

a. Reduce operation to 70 percent of normal load.

W. Transportation

a. Comply with instructions specified in item 4 in General Measures ,Alert Status (4.2.10.1) above.

4.2.11 Nitrogen Dioxide Warning Status

When the warning status for nitrogen dioxide is declared, the following emission reduction actions will be taken.

4.2.11.1 General Measures, Warning Status

1. Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically listed in Table 3-1 shall be postponed until episode termination.

2. There shall be no open burning of coal, heavy oil, or other material.

3. Boiler lancing, where required, will be limited to between noon and 4:00 P.M. upon approval of the Director.

4. Transit authorities will initiate peak operations.

5. Passenger vehicles entering or operating in the center city area will be restricted to those carrying four or more persons, except for outbound vehicles that have discharged passengers within the restricted area.

   The center city area will be defined by the Director.

6. The public will be notified in advance by new media that no automobile or truck traffic will be permitted within the center city area, as defined, if and when an emergency status for nitrogen dioxide is declared.

7. Sightseeing tours will be cancelled.

8. Employees of all government offices - federal, state and municipal - will be dismissed early on a staggered basis. Private companies will be urged to do likewise.

9. Designated principal avenues will be made one-way outbound from the center city area. These will be designated by the Director.

10. All schools and universities will be closed, and all available school buses will supplement regular public transit buses in accordance with prearranged plans.

11. Two hours after the warning status has been declared with a forecast to continue, all parking meter violations and restrictions to on-street parking will be suspended.

12. Taxi cruising will be prohibited in all parts of the city.

13. All deliveries and refuse collecting will be curtailed.

4.2.11.2 Specific Source Curtailment, Warning Status

Action to reduce nitrogen dioxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the NO_2 column. The following describes the action required for each reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 60 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by the Director that meteorological conditions so warrant.

d. Purchase power from power pool.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Do not switch fuels.

b. Reduce operation of oil-firing and gas-firing boilers to 45 percent of normal load.

c. Reduce operation of coal-firing boilers to 60 percent of normal load.

d. Reduce steam load demands consistent with continuing operations.

e. Increase load at company stations that are outside the episode area and divert power into the area, if advised by the Director that meteorological conditions so warrant.

f. Purchase power from power pool.

B. Private Boiler (used for power, heat and/or hot water)

B4. Burning Coal and Oil and/or Gas

a. Do not switch fuels.

b. Reduce operation of oil-firing and gas-firing boilers to 45 percent of normal load.

c. Reduce operation of coal-firing boilers to 60 percent of normal load.

d. Reduce steam load demands consistent with continuing operations.

D. Secondary Ferrous

D2. Cupola, medium or small

a. Prepare for shutdown.

J. Pulp Mills

a. Prepare for shutdown.

P. Coking

a. Prepare for shutdown.

Q. Plastics

a. Prepare for shutdown.

U. Public Utility Burning Only Gas

a. Reduce operation to 45 percent of normal load.

W. Transportation

a. Comply with instructions specified in items 4 through 13 of General Measures, Warning Status (4.2.11.1) above.

4.2.12 Nitrogen Dioxide Emergency Status

When the emergency status for nitrogen dioxide is declared, the following emission reduction actions will be taken.

4.2.12.1 General Measures, Emergency Status

1. Incineration of any form of solid or liquid waste shall be prohibited.
2. There shall be no open burning of any kind of fuel, waste vegetation, refuse, or other material.
3. During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.[6]
4. During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions.[6]
5. During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling.[6]

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[6] Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

6. All places of employment where larger amounts of power, heat or hot water are used shall immediately suspend such operations. The establishments include:

   - Wholesale and retail laundries and dry cleaning establishments
   - Beauty shops and other users of electrical or gas driers
   - Bakeries of breads, pastries, pizza, etc.

7. All stores will be closed except for those engaged in the sale of food and medicines.

8. All outdoor construction and demolition work will be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

9. All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of nitrogen oxides emissions to the maximum reasonable extent.

10. Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

11. No automobile or truck traffic will be permitted within the center city area except for designated emergency vehicles.

12. Unnecessary use of vehicles will be prohibited throughout the remainder of the affected areas of Alabama.

13. Idling of vehicle engines while the vehicles are parked will be prohibited.

14. Through bus and truck service will be rerouted to avoid the center city area.

15. Scheduled bus service will be curtailed in accordance with prearranged plans.

16. Scheduled flights originating at Birmingham Airport will be cancelled. Flights scheduled to terminate at Birmingham Airport will be diverted to an alternate airport outside the affected area.

4.2.12.2 Specific Source Curtailment, Emergency Status

Action to reduce nitrogen dioxide emissions will be taken by sources in Table 3-1 identified by a reference symbol in the NO_2 column. The following describes the action required for each reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 45 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant.

d. Purchase power from power pool.

e. Prepare to reduce voltage by 8 percent.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Do not switch fuels.

b. Reduce coal-burning operation to 50 percent of normal load, or less.

c. Reduce oil-burning and gas-burning operations to 30 percent of normal load, or less.

d. Reduce steam load demands consistent with continuing operations.

e. Increase load at company stations that are outside the episode area and divert power into the area, if advised by Director, Division of Air Pollution Control, that meteorological conditions so warrant

f. Purchase power from power pool.

g. Prepare to reduce voltage by 8 percent.

B. Private Boiler (used for power, heat, and/or hot water)

B4. Burning Coal and Oil and/or Gas

a. Do not switch fuels.

b. Reduce coal-burning operation to 50 percent of normal load, or less.

c. Reduce oil-burning and gas-burning operations to 30 percent of normal load, or less.

D. Secondary Ferrous

a. Complete shutdown

J. Pulp Mills

a. Complete shutdown

P. Coking

a. Complete shutdown.

Q. Plastics

a. Complete shutdown.

U. Public Utility Burning Only Gas

a. Reduce operation to 25 percent of normal load, or less.

W. Transportation

a. Comply with instructions specified in items 10 through 16 of General Measures, Emergency Status (4.2.12.1) above.

4.2.13 Photochemical Oxidants

An episode that follows from photochemical oxidant measurements that exceed the criteria established in sections 3.1.2, 3.1.3, 3.1.4 differs from the other specific pollutant episodes in that:

- The pollutant is not directly found in emissions, but principally develops in the free air by the action of sunlight on oxides of nitrogens, hydrocarbons, and possibly other substances that are already in residence in the atmosphere.
- Much of the pollutant measured at a given afternoon hour may in fact have originated from emissions between 6:00 and 10:00 A.M., possibly from sources located on the order of a hundred miles upwind.
- High concentrations tend to be more uniformly distributed throughout the urban area, unlike the other pollutants, which show high concentrations reasonably close to their respective sources. This phenomenon may be attributed to the time delay required for the formation of photochemical oxidants from resident nitrogen dioxide and hydrocarbons that have been emitted earlier and have been subjected to the dispersive forces of atmospheric turbulence.

Preventive action to reduce concentrations should logically begin during the Episode Watch, following recept of an Atmospheric Stagnation Advisory the previous day. Realistically, however, justification of early action that could have high economic impact would be difficult. The advisory, disseminated by teletype from the National Meteorological Center about 12:30 P.M., based on 7:00 A.M. data, is not accurate enough for definitive action on the following day. There is a more substantial basis for action after the first high concentration of oxidants have been reported. The objective at that point will be to avert further deterioration on the next day if no significant change in meteorological conditions is predicted. To achieve this objective, when the alert status for oxidants is declared, the following measures will be taken directed to reducing emissions of nitrogen oxides and hydrocarbons.

4.2.13.1 General Measures, Alert Status

1. Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically listed

in Table 3-1 shall be accomplished between noon and 4:00 P.M.; however, voluntary postponement until episode termination is desirable.

2. There shall be no open burning of coal, heavy oil, or other material.

3. Boiler lancing, where required, shall be limited to between noon and 4:00 P.M.

4. The public transportation interests will be notified and requested to plan for measures that will be initiated if the warning status for photochemical oxidants is declared. Specifically:

    a. Transit authorities will be advised to plan for peak-hour operations.

    b. An appeal will be made to the public through news media to curtail unnecessary use of private vehicles and to use public transit for local travel.

    c. Sightseeing tours will be advised to reduce activity in preparation for possible cancellation.

    d. Operation of government vehicles will be reduced to higher priority needs as defined by officials with the rank of bureau chief or equivalent.

5. Fuel oil companies serving domestic users will be advised through news media to plan on cancelling deliveries if and when a warning status for oxidants is declared.

6. Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, will be reduced by 50 percent or normal amounts.

7. Transfer of aviation fuel to tank trucks from storage tanks at airports will be permitted. However, the airport managers will be advised that restrictive measures will be imposed if and when a warning status for oxidants is declared.

4.2.13.2 Specific Source Curtailment, Alert Status

Action to reduce emissions of nitrogen dioxide and hydrocarbons will be taken by sources in Table 3-1 identified by a reference symbol in the O_x column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Power Plant

A1. Burning Coal Only

a. Reduce operations to 80 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area.

d. Purchase power from power pool, if available, or prepare to do so.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Reduce coal-burning operations to 85 percent of normal load, or less, and reduce oil-burning and gas-burning operations to 70 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area.

d. Purchase power from power pool, if available, or prepare to do so.

D. Secondary Ferrous

D1. Cupola, large

a. Add no new charges.

b. Do not switch fuels, if alternative fuels are available.

J. Pulp Mills

a. Start no new batches.

b. Allow processes in operation to phase down.

N. Coal Operations Only (crushing, mixing, cleaning, conveying, transfer, desulfurization)

a. Reduce to 50 percent of normal operation, or less.

b. Prepare for shutdown

P. Coking

a. Start no new batches.

b. Allow processes in operation to phase down.

Q. Plastics

a. Start no new batches.

b. Allow processes in operation to phase down.

U. Gas Production (and/or Use as Fuel)

a. Reduce to 60 percent of normal operation, or less.

b. Prepare for further reduction if warning status is declared.

V. Oil Storage

a. Reduce transfer of fuel oil, gasoline, diesel oil, or kerosene from storage tank trucks by at least 50 percent by limiting the number of vehicles to be serviced or amounts transferred, or both.

W. Transportation

a. Comply with instructions specified in items 4 through 7 of General Measures, Alert Status (4.2.13.1) above.

4.2.14 Photochemical Oxidants Warning Status

When the warning status for oxidants is declared, the following emission reduction actions will be taken.

4.2.14.1 General Measures, Warning Status

1. Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically listed in Table 3-1 shall be postponed until episide termination.

2. There shall be no open burning of coal, heavy oil, or other material.

3. Boiler lancing, where required, will be limited to between noon and 4:00 P.M. upon approval of the Director, Division of Air Pollution Control.

4. Transit authorities will initiate peak operations.

5. Sightseeing tours will be cancelled.

6. Employees of all government offices - federal, state and municipal - will be dismissed early on a staggered basis. Private companies will be urged to do likewise.

7. All schools and universities will be closed, and all available school buses will supplement regular public transit buses in accordance with prearranged plans.

8. Two hours after the warning status has been declared with a forecast to continue, all parking meter violations and restrictions to on-street parking will be suspended.

9. Taxi cruising will be prohibited in all parts of the city.

10. All deliveries and refuse collecting will be curtailed.

11. Sales of gasoline and diesel oil at service stations will be limited to five gallons per vehicle. However, the public will be urged to use vehicles only to reach their intended parking places for the duration of the episode.

12. Fuel oil deliveries to all users will be suspended, except to hospitals, sanatoriums, children's homes, homes for the aged and infirm, and special cases approved by the Director, Alabama Department of Health.

13. Aircraft scheduled to terminate their flights at Birmingham Airport will be diverted to an alternate airport outside the affected area.

14. Aircraft departures from Birmingham Airport will be separated by minimum time intervals of seven minutes.

15. Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, will be reduced to 25 percent of normal amounts, or less.

16. Run-ups of aircraft engines undergoing maintenance or repair will be prohibited.

17. All unnecessary transfer of aviation fuel to tank trucks from storage tanks at airports will be prohibited.

4.2.14.2 Specific Source Curtailment, Warning Status

Action to reduce emissions of nitrogen dioxide and hydrocarbons will be taken by sources in Table 3-1 identified by a reference symbol in the O_x column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Power Plant

A1. Burning Coal Only

a. Reduce operations to 70 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area upon approval of the Director, Division of Air Pollution Control.

d. Purchase power from power pool, if available, or prepare to do so.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Do not switch fuels.

b. Reduce coal-burning operations to 75 percent of normal load, or less.

c. Reduce oil-burning and gas-burning operations to 50 percent of normal load, or less.

d. Reduce steam load demands consistent with continuing operations.

e. Increase load at company stations that are outside the episode area, and divert power into the area upon approval of the Director, Division of Air Pollution Control.

f. Purchase power from power pool, if available, or prepare to do so.

D. Secondary Ferrous

D1. Cupola, large

a. Continue steps taken under alert status.

b. Prepare for shutdown if emergency status is declared.

J. Pulp Mills

a. Reduce operation to minimum that can be sustained short of complete shutdown.

b. Prepare for shutdown if emergency status is declared.

N. Coal Operations Only (crushing, mixing, cleaning, conveying, transfer, desulfurization

a. Complete shutdown of operations.

P. Coking

a. Reduce operation to minimum that can be sustained short of complete shutdown.

b. Prepare for shutdown if emergency status is declared.

Q. Plastics

a. Reduce operation to minimum that can be sustained short of complete shutdown.

b. Prepare for shutdown if emergency status is declared.

U. Gas Production (and/or Use As Fuel)

a. Reduce to 30 percent of normal operations, or less.

b. Prepare for complete shutdown if emergency status is declared.

V. Oil Storage Facilities

a. Reduce transfer of fuel oil, gasoline, diesel oil, or kerosene from storage tanks to tank trucks to 25 percent or less of amounts transferred in normal operations.

W. Transportation

a. Comply with instructions specified in items 4 through 17 of General Measures, Warning Status (4.2.14.1) above.

4.2.15 Photochemical Oxidants Emergency Status

When the emergency status for oxidants is declared, the following emission reduction actions will be taken.

4.2.15.1 General Measures, Emergency Status

1. Incineration of any form of solid or liquid waste shall be prohibited.

2. There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

3. During the heating season, the operation of heating units in all buildings within affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.[7]

4. During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions.[7]

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[7] Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

5. During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling.[7]

6. All places of employment where larger amounts of power, heat or hot water are used shall immediately suspend such operations. The establishments include:

    - Wholesale and retail laundries and dry cleaning establishments
    - Beauty shops and other users of electrical or gas driers
    - Bakeries of breads, pastries, pizza, etc.
    - Public baths, steam rooms, and heated swimming pools

7. All stores will be closed except for those engaged in the sale of food and medicines.

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[7] See Footnote 7 on preceding page.

8. All outdoor construction and demolition work will be suspended until episode termination, except for work that left unfinished, might result in a public hazard.

9. All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of nitrogen oxides and hydrocarbon emissions to the maximum reasonable extent.

10. Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

11. All unnecessary use of vehicles will be prohibited throughout all of the affected areas of Alabama.

12. Idling of vehicle engines while the vehicles are parked will be prohibited.

13. Through bus and truck service will be rerouted to highways outside the affected areas of Alabama.

14. Scheduled bus service will be curtailed in accordance with prearranged plan.

15. Scheduled flights originating at Birmingham will be cancelled. Flights scheduled to terminate at Birmingham Airport will be diverted to alternate airport outside the affected areas.

16. Aircraft departures for through flights will be separated by minimum time intervals of fifteen minutes at Birmingham Airport and ten minutes at Mobile Airport.

17. All unnecessary transfer of aviation fuel to tank trucks at airports will be prohibited.

18. Run-ups of aircraft engines undergoing maintenance or repair will be prohibited.

19. Sales of gasoline and diesel oil at service stations will be prohibited.

20. Fuel oil deliveries to hospitals, sanatoriums, children's homes, homes for the aged and infirm, and special cases approved by the Director, Alabama Department of Health, will be made only in response to emergency calls. Fuel oil deliveries to all other users will be suspended.

4.2.15.2. Specific Source Curtailment, Emergency Status

Action to reduce emissions of nitrogen dioxide and hydrocarbons will be taken by sources in Table 3-1 identified by a reference symbol in the O_x column. The following describes the action required for each reference symbol.

A. Public Utility Power Plant

A1. Burning Coal Only

a. Reduce operations to 55 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area, upon the approval of the Director, Division of Air Pollution Control.

d. Purchase power from power pool, as required.

e. Prepare to lower voltage by 5 percent.

A2. Burning Coal and Oil With or Without Availability of Gas

a. Reduce coal-burning operations to 60 percent of normal load, or less.

b. Reduce oil-burning and gas-burning operations to 30 percent of normal load, or less.

c. Reduce steam load demands consistent with continuing operations.

d. Increase load at company stations that are outside the episode area, and divert power into the area, upon the approval of the Director, Division of Air Pollution Control.

e. Purchase power from power pool, as required.

f. Prepare to lower voltage by 5 percent.

D. Secondary Ferrous

a. Complete shutdown.

J. Pulp Mills

a. Complete shutdown.

N. Coal Operations Only (crushing, mixing, cleaning, conveying, transfer, desulfurization)

a. Complete shutdown.

P. Coking

a. Complete shutdown.

Q. Plastics

a. Complete shutdown

U. Gas Production (and/or use as fuel)

a. Suspend all transfer operations until episode termination.

W. Transportation

a. Comply with instructions specified in items 10 through 20 of General Measures, Emergency Status (4.2.15.1) above.

4.3 GENERAL EPISODE EMISSION REDUCTION PLAN

In the event that ambient concentrations of three or more pollutants simultaneously reach or exceed their respective episode criteria, and no improvement in meteorological conditions is predicted for the next twelve hours, a general alert, warning, or emergency status will be declared. If the individual pollutant levels correspond to a different episode status, the declared general status will be the highest status level.

4.3.1 General Alert Status

When the general alert status is declared, the following will be accomplished to reduce pollutant emissions.

4.3.1.1 General Measures, Alert Status

1. Solid or liquid waste incineration from office buildings, apartment houses, and other industrial facilities not specifically listed in Table 3-1 shall be accomplished only between noon and 4:00 P.M; however, voluntary postponement until episode termination is desirable.

2. There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

3. Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and 4:00 P.M.

4. Transit authorities will be advised to intiate peak operations.

5. An appeal will be made to the public through news media to curtail unnecessary use of private vehicles and to use public transit for local travel.

6. Sightseeing tours will be cancelled.

7. Operation of government vehicles will be reduced to higher priority needs as defined by officials with the rank of bureau chief or equivalent.

8. The public will be further notified of the normal downtown boundaries of affected cities in Alabama where pollutant concentrations are highest. Advisories will discourage incursions into this area unless absolutely necessary, for the duration of the episode.

   The center city area will be defined by the Director.

9. Gasoline and diesel oil deliveries to service stations will be curtailed.

10. Fuel oil deliveries to industrial users will be curtailed.

11. Fuel oil companies serving domestic users will be advised through news media to plan on cancelling deliveries if and when a general warning status is declared.

12. Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, will be reduced by 50 percent of normal amounts.

13. Transfer of aviation fuel to tank trucks from storage tanks at airports will be permitted. However, the airport managers will be advised that restrictive measures will be imposed if and when a warning status for oxidants is declared.

4.3.1.2 Specific Source Curtailment, Alert Status

Action to reduce pollutant emissions will be taken by the sources in Table 3-1 identified by a reference symbol in the General Episode column. The following describe the action required for each corresponding reference symbol.

A. Public Utility Power Plant

   A1. Burning Coal Only

      a. Reduce operations to 70 percent of normal load, or less.

      b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area, and divert power into the area.

d. Purchase power from power pool, if available, or prepare to do so.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Reduce load on coal-firing boilers to 60 percent of normal load, or less.

b. Reduce load on oil-firing boilers to 70 percent of normal load, or less.

c. Reduce load on gas-firing boilers to 80 percent of normal load, or less.

d. Increase load at company stations that are outside the episode area, and divert power into the area.

e. Purchase power from power pool, if available, or prepare to do so.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

a. Reduce operations to 75 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

B4. Burning Coal and Oil and/or Gas

a. Reduce load on coal-firing boilers to 60 percent of normal load, or less.

b. Reduce load on oil-firing boilers to 70 percent of normal load, or less.

c. Reduce load on gas-firing boilers to 80 percent of normal load, or less.

d. Reduce steam load demands consistent with continuing operations.

C. Integrated Iron and Steel

Prepare to stop slag quenching, incineration, and scarfing operations and prepare to operate coke plant for minimum emissions.

C1. Open Hearth Furnaces

- a. Make no new heats.
- b. Ascertain that emission control equipment, if any, is operating at maximum efficiency.
- c. Prepare for shutdown of units with no high-efficiency air pollution controls.

C3. Blast Furnace

- a. Add no new charges.
- b. Ascertain that equipment is operating at maximum efficiency.

C4. Sintering

- a. Reduce operation to 50 percent of normal load.

D. Secondary Ferrous

D1. Cupola, large

- a. Add no new charges.
- b. Prepare to shut down equipment without controls.
- c. Switch fuel from coal to oil or gas, if appropriate.

D2. Cupola, medium or small

- a. Add no new charges.
- b. Prepare to shut down equipment without controls.
- c. Switch fuel from coal to oil or gas, if appropriate.

D3. Electric Arc Furnace

- a. Start no new heats.

b. Ascertain that plenum hoods, fans, ducts, and air pollution control equipment, if any, are operating at maximum efficiency.

c. Prepare for shutdown.

G. Electro-Metals and Refractories

a. Add no new charges.

b. Prepare to shut down equipment without controls.

H. Primary Aluminum

a. Add no new charges.

b. Curtail high-emission auxiliary processes such as chlorine blowing.

I. Brick Manufacture

a. Start no new batches.

b. Allow processes in operation to phase down.

J. Pulp Mills

a. Start no new batches.

b. Allow processes in operation to phase down.

M. Cement Manufacture, Lime Kilns

a. Start no new batches.

b. Allow processes in operation to phase down.

N. Stone, Coal, Mineral, Sand (crushing,mixing, cleaning, conveying, transfer)

a. Reduce to 50 percent of normal operation.

b. Prepare for shutdown.

O. Clay Processes

a. Reduce to 50 percent of normal operation.

b. Prepare for shutdown.

P. Coking

   a. Start no new batches.

   b. Allow processes in operation to phase down.

Q. Plastics

   a. Start no new batches.

   b. Allow processes in operation to phase down.

R. Sulfuric Acid Manufacture

   a. Start no new batches.

   b. Allow processes in operation to phase down.

S. Incineration

   a. Reduce to 50 percent of normal operation.

   b. Prepare for shutdown.

T. Fertilizer Manufacture

   a. Start no new batches.

   b. Allow processes in operation to phase down.

V. Oil Storage

a. Reduce transfer of fuel oil, gasoline, diesel oil, or kerosene from storage tanks to tank trucks by at least 50 percent by limiting the number of vehicles to be serviced or amounts transferred, or both.

W. Transportation

a. Comply with instructions in items 4 through 13 of General Measures, Alert Status (4.3.1.1) above.

4.3.2 General Warning Status

When the general warning status is declared, the following emission reduction actions will be taken.

4.3.2.1 General Measures, Warning Status

1. Solid waste incineration from all office buildings, apartment houses, and other industrial facilities not specifically listed in Table 3-1 shall be postponed until episode termination.
2. There shall be no open burning of coal, heavy oil, or other material.
3. Boiler lancing and soot blowing, where required, will be limited to between noon and 4:00 P.M. upon approval of the Director, Division of Air Pollution Control.
4. Passenger vehicles entering or operating in the center city area will be restricted to those carrying four or more persons except for outbound vehicles that have discharged passengers within the restricted area.
5. The public will be notified by news media that no automobile or truck traffic will be permitted within the center city area, as defined, if and when a general emergency status is declared.
6. Designated principal avenues will be made one-way outbound from the center city. These shall be designated by the Director.
7. All schools and universities will be closed, and all available school buses will supplement regular public transit buses in accordance with prearranged plans.

8. Two hours after the warning status has been declared, and is forecast to continue, all parking meter violations and restrictions to on-street parking will be suspended.

9. Staggered work hours will be in effect in all government offices - federal, state, and municipal - and in as many private offices as volunteer to do so.

10. Taxi cruising will be prohibited in all parts of Anniston, Birmingham, and Mobile.

11. All deliveries and refuse collecting will be curtailed.

12. Operation of government vehicles will be reduced to higher priority needs as defined by officials with the rank of bureau chief or equivalent.

13. Sales of gasoline and diesel oil at service stations will be limited to five gallons per vehicle. However, the public will be urged to use vehicles only to reach their intended parking places for the duration of the episode.

14. Fuel oil deliveries to all users will be suspended, except to hospitals, sanatoriums, children's homes, homes for the aged and infirm, and special cases approved by the Director.

15. Aircraft scheduled to terminate their flights at Birmingham Airport will be diverted to alternate airports outside the affected area.

16. Aircraft departures from Birmingham Airport will be separated by minimum time intervals of seven minutes.

17. Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, will be reduced to 25 percent of normal amounts, or less.

18. Run-ups of aircraft engines undergoing maintenance or repair will be prohibited.

4.3.2.2 Specific Source Curtailment, Warning Status

Action to reduce pollutant emissions will be taken by sources in Table 3-1 identified by a reference symbol in the General Episode column. The following describes the action required for each corresponding reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

- a. Reduce operations to 50 percent of normal load, or less.
- b. Reduce steam load demands consistent with continuing operations.
- c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by the Director that meteorological conditions so warrant.
- d. Purchase power from power pool.

A2. Burning Coal and Oil, With or Without Availability of Gas

- a. Reduce load on coal-firing boilers to 45 percent of normal load, or less.
- b. Reduce load on oil-firing boilers to 55 percent of normal load, or less.
- c. Reduce load on gas-firing boilers to 65 percent of normal load, or less.
- d. Increase load at company stations that are outside the episode area and divert power into the area, if advised by the Director that meteorological conditions so warrant.
- e. Purchase power from power pool.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

- a. Reduce operations to 50 percent of normal load, or less.
- b. Reduce steel load demands consistent with continuing operations.

B4. Burning Coal and Oil and/or Gas

- a. Reduce load on coal-firing boilers to 45 percent of normal load, or less.
- b. Reduce load on oil-firing boilers to 55 percent of normal load, or less.
- c. Reduce load on gas-firing boilers to 65 percent of normal load, or less.
- d. Reduce steel load demands consistent with continuing operations.

C. Integrated Iron and Steel

Continue all steps taken during alert status. Increase coking time, Stop slag quenching, incineration, and scarfing.

C1. Open Hearth Furnaces.

a. Begin banking operations.

C3. Blast Furnace

a. Allow existing operation to continue toward completion, but add no new charges.

b. Prepare for possible shutdown if emergency status is declared.

C4. Sintering

a. Cease operations.

D. Secondary Ferrous, all

a. Continue steps taken during alert status.

b. Shut down furnaces without air cleaners.

c. Prepare to shut down furnaces without high efficiency controls. Add no more metal. Start no new heats.

G. Electro-Metals and Refractories

a. Begin shutdown.

H. Primary Aluminum

a. Add no new charges to pots.

b. Cease all auxiliary processes.

I. Brick Manufacture

a. Continue steps taken during alert status.

J. Pulp Mills

a. Continue steps taken during alert status.

M. Cement Manufacture, Lime Kilns

a. Continue steps taken during alert status.

N. Stone, Coal, Mineral, Sand: (crushing, mixing, cleaning, conveying, transfer)

a. Cease operations.

O. Clay Processes

a. Cease operations.

Q. Plastics

a. Continue steps taken during alert status.

R. Sulfuric Acid Manufacture

a. Continue steps taken during alert status.

S. Incineration

a. Cease operations.

T. Fertilizer Manufacture

a. Continue steps taken during alert status.

V. Oil Storage

a. Transfer of fuel oil, gasoline, diesel oil, or kerosene from storage tanks to tank trucks will be reduced to 25 percent or less of amounts transferred in normal operations.

W. Transportation

a. Comply with instructions in items 4 through 18 of General Measures, Warning Status (4.3.2.1) above.

4.3.3 General Emergency Status

When the General Emergency Status is declared, the following emission reduction actions will be taken.

4.3.3.1 General Measures, Emergency Status

1. Incineration of any form of solid or liquid waste shall be prohibited.
2. There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

3. During the heating season, the operation of heating units in all buildings within affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.[8]

4. During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions.[8]

5. During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostate temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling.[8]

6. All places of employment where larger amounts of power, heat or hot water are used shall immediately suspend such operations.

   The establishments include:

   - Wholesale and retail laundries and dry cleaning establishments;
   - Beauty shops and other users of electrical or gas driers;
   - Bakeries of breaders, pastries, pizza, etc.;
   - Public baths, steam rooms, and heated swimming pools.

7. All outdoor construction and demolition work will be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

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[8] Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

8. All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of pollutant emissions to the maximum reasonable extent.

9. All stores will be closed except for those engaged in the sale of food and medicines.

10. Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

11. All unnecessary use of vehicles will be prohibited throughout all of the affected areas of Alabama.

12. Idling of vehicle engines while the vehicles are parked will be prohibited.

4.3.3.2 Specific Source Curtailment, Emergency Status

Action to reduce particulate emissions will be taken by sources in Table 3-1 identified by a reference symbol in the General Episode column. The following describe the action required for each corresponding reference symbol.

A. Public Utility Plant

A1. Burning Coal Only

a. Reduce operations to 30 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing operations.

c. Increase load at company stations that are outside the episode area and divert power into the area, if advised by the Director that meteorological conditions so warrant.

d. Purchase power from power pool.

e. Reduce line voltage by 8 percent of normal.

A2. Burning Coal and Oil, With or Without Availability of Gas

a. Reduce load on coal-firing boilers to 25 percent of normal load, or less.

b. Reduce load on oil-firing boilers to 35 percent of normal load, or less.

c. Reduce load on gas-firing boilers to 45 percent of normal load, or less.

d. Increase load at company stations that are outside the episode area and divert power into the area, if advised by the Director that meteorological conditions so warrant.

e. Purchase power from power pool.

f. Reduce line voltage by 8 percent of normal.

B. Private Boiler (used for power, heat, and/or hot water)

B1. Burning Coal Only

a. Reduce operations to 30 percent of normal load, or less.

b. Reduce steam load demands consistent with continuing plant operations.

B4. Burning Coal and Oil and or Gas

a. Reduce load on coal-firing boilers to 25 percent of normal load, or less.

b. Reduce load on oil-firing boilers to 35 percent of normal load, or less.

c. Reduce load on gas-firing boilers to 45 percent of normal load, or less.

C. Integrated Iron and Steel

a. Continue all steps taken during warning status.

b. Reduce coke operations to a minimum.

c. Complete shutdown of all furnaces without high efficiency controls.

C1. Open hearth furnaces

a. Bank fires to continue at minimum level of emissions, or shut down if possible.

C3. Blast furnaces

a. Bank fires to continue at minimum level of emissions, or shut down if possible.

C4. Sintering

  a. Remain shut down.

D. Secondary Ferrous, all

  a. Complete shutdown of high emission furnaces.

G. Electro-Metals and Refractories

  a. Continue shutdown.

H. Primary Aluminum

  a. Add no new charges to pots.

  b. Shut down all auxiliary processes.

I. Brick Manufacture

  a. Remain shut down.

J. Pulp Mills

  a. Remain shut down.

M. Cement Manufacture, Lime Kilns

  a. Remain shut down.

N. Stone, Coal, Mineral, Sand (crushing, mixing, cleaning, conveying, transfer)

  a. Remain shut down.

O. Clay Processes

  a. Remain shut down.

Q. Plastics

  a. Remain shut down.

R. Sulfuric Acid Manufacture

  a. Remain shut down.

S. Incineration

  a. Remain shut down.

T. Fertilizer Manufacture

a. Remain shut down.

V. Oil Storage

a. Suspend all transfer operations until episode termination.

W. Transportation

a. Comply with instructions in items 10 through 12 of General Measures, Emergency Status (4.3.3.1) above.

5.0 EPISODE OPERATIONS

This section of the plan identifies the information and control center for episode action(s), describes its physical layout, and specifies the attendant manning required for each operating mode.

5.1 STATE EMERGENCY ACTION CENTER (SEAC)

The information and control center for episode action is henceforth to be known as the State Emergency Action Center, or SEAC. It will be located in the office of the Director, Division of Air Pollution Control, State Office Building, Montgomery, where suitable quarters are being obtained for the anticipated expansion in programs, services, personnel, and resources.

The SEAC site will meet the following requirements:

- Proximity to higher authority, primarily the Chairman, Alabama Air Pollution Control Commission; the Director, Department of Public Health; and the Governor
- Availability of physical space
- Availability of emergency power and communication links
- Accessibility to supporting services (analytical laboratory, new media, meteorological services)
- Accessibility for emergency technical staff response.

Though not manned at all times, the SEAC will retain its identity and not be merely a temporary conversion of an existing office or desk. The essential consideration here is to have an identifiable location specifically associated with emergency actions.

5.1.1 Physical Layout

While the layout of the SEAC room will depend on the size, shape, door and window locations, and other features of the actual room, it will be adequate to accommodate the staff and equipment required during full activation as specified in Section 5.1.5.3. At least one wall will be free from windows or other obstructions to enable the mounting of display material.

The wall display will include base maps of Birmingham and Mobile and a base map of the entire state ruled to show Universal Transverse Mercator (UTM) grid spaces. All major point sources and mointoring sites will be prominently shown. The maps will be mounted so that they can be overlaid with sheets of acetate or similar material on which isopleths or other useful information may be entered. Data displays will also include charts with moveable markers, preferably magnetic, for all data points.

Space will also be allocated to file cabinets, teletypes for meteorological and air quality data, and clipboard displays for trimmed teletype copy.

5.1.2 Data Displays

Displays of trends and other data will be kept up to date between episodes, not only to maintain "ready" status but also to keep the organization episode minded. The data points on display will be highest among all synoptic reports from monitoring sites. In non-episode situations, only the high and low for each day and pollutant will be shown. During an Episode Watch or declared episode status, readings will be posted every two hours. In order that observed concentrations can be compared with baseline data, the latter will consist of daily high and low readings for each pollutant for the preceding two weeks. Criteria levels will be shown on the chart for each pollutant. A reported pollutant concentration that reaches or exceeds 50 percent of the alert level for that pollutant will be brought to the attention of the Division Director, or in his absence, to a designated staff engineer or administrator.

At the top of each chart will be a removable large shingle on which the words "ALERT", "WARNING", or "EMERGENCY" will appear corresponding to the declared episode status. In the event a general episode is declared, the current general episode status will be shown on a separate plaque or poster.

5.1.3 Operating Modes

The operating modes of the State Emergency Action Center will be as follows:

Routine Surveillance - when no episode or Episode Watch has been declared.

Partial Activation - when an Episode Watch is put into effect.

Full Activation - when an episode status has been declared.

5.1.4 SEAC Manning

Manning of the SEAC will be adequate for execution and accomplishment of the surveillance, communications, and operational requirements of the operational mode in effect.

5.1.4.1 Routine Surveillance

During normal operations between episodes, meteorological and air quality data will be routinely received and posted by an assigned member of the SEAC clerical or secretarial staff.

5.1.4.2 Partial Activation

SEAC manning during a partial activation will consist of the following personnel, as a minimum. Assignments will be rotated on a shift basis in order to provide continuous 24-hour per day coverage.

Coordinator - A senior staff engineer, administrator, or meteorologist who is acting in charge of the SEAC during this operational mode. His duties include:

- Verification of air quality trends and meteorological predictions
- Maintaining contact with appropriate decision-makers, including the Division Director and offices of higher authorities
- Assuring the dissemination of preliminary notices on impending abatement

- Keeping news media fully informed of developments
- Notifying the Federal Emergency Operation Control Center and if appropriate, the Emergency Action Center of the neighboring state or states that may be affected.

Data Specialist - An engineer or engineer technician. His duties include:

- Receiving, validating, and analyzing incoming air quality data
- Maintaining contact with designated staff members of the National Weather Services
- Maintaining data interchange with the state air pollution control agencies of Tennessee, Mississippi, Georgia, and Florida, and with appropriate local agencies of these states.

Abatement Engineer - Staff engineer or engineer technician. His duties include:

- Contacting the principal point sources to initiate preparatory measures in accordance with pre-planned schedules (See Section 4.0)
- Dispatching and maintaining contact with field inspectors for intensified source surveillance
- Dispatching and maintaining contact with mobile air sampling units for intensified air quality surveillance.

5.1.4.3 Full Activation

SEAC manning during a full activation mode will not only require maximum utilization of the total available office force, but may also require the participation of outside or part-time consultants in accordance with prior arrangements. In addition to the personnel assignments above, the following specialties will be represented.

Consultant meteorologist

Environmental health physician

Attorney - experienced in legal aspects of air pollution abatement.

Transportation specialist - principally on problems relating to curtailment or cessation of private automobile and truck traffic.

Communications engineer or public relations specialist - to handle information to public safety agencies, hospitals, physicians, the telephone company, and the general public via emergency radio and news media.

Senior Clerk - to document all activity, orders, declarations, and decisions during the episode, and to log arrivals and departures of all staff and outside personnel and their participation in these actions. This document will be known as the Episode Logbook.

5.1.4.4 Termination

SEAC manning following a declaration of episode termination will revert from full activation to partial activation for a period of two hours, and then to the routine surveillance mode. This orderly transition to deactivation will provide time for a quick review and assessment of the event and a check on all reports, data, and documentation - including the Episode Logbook - that may be needed for an after-action report and other purposes.

5.2 INTERSTATE COOPERATION

Meteorological conditions that are conducive to episode development in Alabama often extend into portions of one or more of the neighboring states. It is, therefore, of concern to residents of an affected area that source emissions which contribute to large-scale, interstate episodes be reduced. Hence, effective air quality management in general and episode avoidance in particular require coordinated action programs that involve representatives from adjacent states as well as the State of Alabama. This fact is basic to prior implementation plans for controlling sulfur oxide and particulate air pollutants proposed for a number of interstate air quality control regions pursuant to the Air Quality Act of 1967. The validity of this approach will receive continued recognition through cooperative and coordinated action with air pollution control agencies of adjacent states on an ad-hoc basis and through informal sessions for planning and review.

Within one year, the State of Alabama will meet with other states to develop intergovernmental cooperation for meteorological monitoring, episode avoidance and abatement, source information exchange, and air quality systems. Participants will include officials from the following adjacent state agencies for episodes in the specified areas.

Episodes in the Mobile-Salco Area

Mississippi Air and Water Control Commission
P. O. Box 827
Jackson, Mississippi 39205
Telephone: (601) 354-6783
Director, Division of Air Pollution: Jack H. Curry

State of Florida Department of Air and Water Pollution Control
315 South Calhoun Street
Tallahassee, Florida 32301
Telephone: (904) 224-9151
Executive Director: Vincent D. Patton

Episodes in the Phenix City-Columbus Area (primary sources in Georgia)

Georgia Air Quality Control Branch
47 Trinity Avenue, S. W.
Atlanta, Georgia 30330
Telephone: (404) 656-4867
Director: Robert H. Collons, Jr.

Episodes in the Tennessee Valley

Tennessee Department of Health
Division of Air Pollution Control
C2-212 Cordell Hull Building
Nashville, Tennessee 37219
Telephone: (615) 741-2061
Director: H. L. Hodges

6.0 EPISODE COMMUNICATIONS

Since emergency episodes call for specific action by many emitters of air pollution, both public and private, the episode plan is perhaps the most highly visible portion of the activities of an air pollution program. The communications must be extremely well worked out prior to the action required during an actual episode. Since the atmospheric conditions involved are those which could lead to imminent and substantial endangerment of human health, the public will be intensely interested in receiving rapid updates on the status of the condition.

6.1 COMMUNICATIONS CENTER

The State Emergency Action Center will be the single contact point for the dissemination of information. Except for matters of purely local importance, local agencies will refer requests for information from the news media and other sources to the SEAC or will disseminate communications releases originating from the SEAC.

6.2 INTERAGENCY COMMUNICATIONS

Local programs within the State of Alabama will operate as an integral part of the state program and communications will be on an informal, free-flowing basis between the SEAC and affected local agencies. When simultaneous communication between staff members of the respective agencies is necessary, conference calls between the various offices will be set up.

Communication with other states and with EPA will be handled on a formal, well-documented basis. A log sheet will be kept for each communication (normally by telephone) with another state or with EPA. This log sheet will identify the date and time of the telephone call, the name of the party who initiated the call and the name of the responder. The message and conversation should be noted in sufficient detail that the sense of the message can be gathered by a later reading of this log sheet.

6.3 COMMUNICATION WITH SOURCES

The reduction of emissions during an episode is accomplished by actions taken by emission sources on a voluntary or mandatory basis. When an Episode Watch is initiated, the Coordinator will contact his list of sources who have offered to voluntarily cut back some portion of their operations during these conditions. The Coordinator will be sensitive to the pollutant burden in the area and use judgment in contacting sources so that unnecessary interference with the normal flow of business does not occur. A log sheet will be kept of such telephone calls for future reference.

When a stage requiring mandatory emission reduction from emmission sources is activated, the Abatement Engineer will make telephone or telegraph contact with the point sources who must reduce emissions in accordance with the pre-planned schedule for the affected region and for the specific pollutants which must be controlled. A record will be kept of all such contacts.

6.4 COMMUNICATIONS WITH NEWS MEDIA

The news media play a key role during an emergency episode, since they act as a pipeline between the control agency and the general public, and allow the agency to inform the public as to the specific actions they should be taking to reduce pollution and to avoid damage to themselves. In addition, the news media will be used to alert many general categories of emission sources which are both too numerous to reach by telephone and do not have any central organization to contact.

Contact with news media will be the responsibility of the Coordinator, or the Director, Division of Air Pollution Control, or the Governor of Alabama. There will be no contact with the media by any other staff member during an episode. It is particularly important that the telephone switchboard direct all calls from news media only to the designated contact in order to prevent interruptions and delays in the communications within the SEAC.

Pre-planned news releases will be distributed any time there is an activation or deactivation of an episode level. Since public awareness is so intense in air pollution, there will be numerous requests for expanded information and the procedure must be pre-planned to determine the cutoff point at which these requests will be accepted or rejected.

The Director, Division of Air Pollution Control, will have principal responsibility for coordination with the news media beyond the press releases which will be distributed by the Coordinator.

6.5 EPISODE TERMINATION REPORT PROCEDURE

Within two weeks after the return of conditions to the surveillance level, a complete report will be prepared detailing the history of the episode and verifying the actions taken. This report will be used as an historical record of the episode and, more importantly, will provide the mechanism for procedure reviews to enable procedural improvements as sources become more complex, air quality monitoring becomes more sophisticated, and the SEAC staff becomes more experienced.

6.6 COMMUNICATIONS MANUAL

The Episode Communications Manual, included as Appendix A of this plan, will define all operating procedures to be utilized during SEAC operations. These procedures are designed to enable a smooth flow of information to a focal point within the SEAC providing the decision-makers with the most current data for evaluation. The major administrative burden will be placed upon the Coordinator, who will make recommendations to the Director, Division of Air Pollution, concerning the activation of various episode stages.

There will be a heavy dependence upon pre-printed information sheets and communications directives. These sheets will be utilized to generate a case history for each occurrence of any stage of episode action.

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7.0 SURVEILLANCE

The elements of surveillance activity which pertain to air pollution episodes include air quality monitoring, meteorological monitoring, data handling and source inspection. The purpose of the surveillance activity is to assure the timely receipt of required data at the SEAC for use in making operational decisions. This section describes the specific surveillance activities which will be conducted on a routine basis and during an air pollution episode.

7.1 AIR QUALITY MONITORING

Relatively few continuous monitoring instruments will be used for the State of Alabama monitoring network. These instruments will be located in the areas where episode potential exists and where they are accessible to local chemists, engineers, and technicians for frequent inspection and data observation.

These continuous instruments will be equipped with strip chart recorders and magnetic tape recorders. For routine air quality monitoring and data reduction, the magnetic tape recorders will be reduced in batches of about four to six weeks of data. For episode monitoring, a field operator will be stationed at the monitoring site. Only the strip chart readings will be utilized and information will be transmitted to the SEAC by telephone.

A manual record of routine observations will be obtained from the field maintenance personnel responsible for the day-to-day operation of the instruments. Data will be telephoned to the SEAC between 2:00 p.m. and 3:30 p.m. on a daily basis when the system is in the routine surveillance mode. The strip charts will be unrolled to the time of the previous readings, and estimates will be made for:

Sulfur dioxide - maximum one-hour and maximum 24-hour concentration

Oxidant - maximum one-hour concentration

Carbon monoxide - maximum one-hour and maximum eight-hour concentration

Particulate - maximum two-hour tape sampler reading and most recent 24-hour suspended particulate concentration measured by high volume sampler

Nitrogen dioxide - most recent 24-hour concentration determined by bubbler (maximum 24-hour concentration if continuous instrument is used)

Table 7-1 lists the episode monitoring stations in Alabama and the pollutants measured at each of these monitoring stations.

Air quality data received daily at the SEAC will be entered on an Air Quality Data: Routine Surveillance form (Figure 7-1) and will be reviewed by the clerk in charge of recording the information. In the event that any individual readings exceed 50 percent of the alert level concentration, the Director or his designated representative shall be informed verbally, substantiated by memorandum, that such conditions exist. If, in the opinion of the Director, there is reasonable probability that pollutant levels will increase, he shall request more frequent reports form the air quality monitoring station(s) on the pollutant(s) of concern. The data from the accelerated monitoring schedule will be recorded on the Air Quality Data: Activation Mode form (Figure 7-2).

When an Episode Watch is put into effect, either on the basis of an atmospheric stagnation advisory or on the basis of measured poor air quality which is expected to deteriorate further, the SEAC will operate in the partial activation mode. The Coordinator shall authorize such personnel staffing as necessary to acquire daily afternoon reports of air quality measurements at the affected station(s). High volume air samplers at these stations will be operated continuously and 24-hour samples will be collected using a mid-morning to mid-morning, 24-hour period. This schedule will take priority over the routine sampling schedule and the 24-hour period which best represents the scheduled 24-hour reading shall be used for the long-term data bank.

Table 7-1. EPISODE MONITORING STATIONS

Region	Location	Pollutant(s)* Measured
001	None	
002	Montgomery: Fire Station #5	SP
003	Childersburg	SP
	Gadsden 0440	SP
004	North Birmingham	SP, NO_2, CO, OX
	Birmingham - Downtown	SP, NO_2, CO, OX
	Fairfield City Hall	SP, NO_2, CO, OX
005	Mobile: WKRG Transmitter	SP, OX
	Mobile: NASH	SP
	Salco	SO_2
006	None	
007	Huntsville: Governor's Drive and Memorial Parkway	NO_2, CO
	Widow's Creek: TVA #3	SO_2
	Tuscumbia	SP, SO_2, CO
	Florence	SP

* SP = suspended particulates (high volume and tape)

NO_2 = nitrogen dioxide (bubbler)

SO_2 = sulfur dioxide (continuous)

CO = carbon monoxide (continuous)

OX = oxidant (continuous)

Figure 7-1. Air Quality Data: Routine Surveillance

Station:____________________

Date:_____________Time:__________

Reported by:___________________________

Received by:___________________________

Time Period Reported:__________to____________

Pollutant	Unit	Max. 1 hr.	Max. 2 hr.	Max. 8 hr.	Max. 24 hr.
Particulate	$\mu g/m^3$	xxx	xxx	xxx	
Particulate	COHS	xxx		xxx	xxx
SO_2	ppm		xxx	xxx	
Oxidant	ppm		xxx		xxx
CO	ppm		xxx		xxx
SO_2 x particulate					

Figure 7-2. Air Quality Data: Activation Mode

Station:______________

Date:________Time:________

Reported by:____________________

Received by:____________________

Time Period Reported:________to________

		Particulate		SO_2	Oxidant	CO
Date	Time	COHS	$\mu g/m^3$	ppm	ppm	ppm
	1200-1300					
	1300-1400					
	1400-1500					
	1500-1600					
	1600-1700					
	1700-1800					
	1800-1900					
	1900-2000					
	2000-2100					
	2100-2200					
	2200-2300					
	2300-2400					
	0000-0100					
	0100-0200					
	0200-0300					
	0300-0400					
	0400-0500					
	0500-0600					
	0600-0700					
	0700-0800					
	0800-0900					
	0900-1000					
	1000-1100					
	1100-1200					

7.2 METEOROLOGICAL MONITORING

The Director, SEAC will obtain Air Stagnation Advisories (ASA's) from the Weather Service Forecast Office (WSFO).[9] The WSFO normally issues an ASA if stagnation conditions are forecast to be continuous for at least 36 hours, but it will issue alerts for shorter periods of time upon request. The Director will obtain daily ASA's during routine operations and will arrange for updated forecasts every 12 hours during an episode stage.

The National Weather Service will fund its own WSFO teletypewriter line charges, and the Division of Air Pollution Control will explore the possibility of installing a teletype in the SEAC room to receive ASA's as well as other messages. The DAPC will rely on these advisories, as well as the forecasts of local weather programs in Birmingham, Mobile, and Huntsville to advise the SEAC of local meteorological conditions.

Birmingham is scheduled to become a National Weather Service EMSU station (a special unit which predicts air stagnations specifically for air pollution purposes) and communications between this office and the SEAC will be vital.

7.3 SOURCE INSPECTION

The available tools and procedures to exercise the source inspection or surveillance function during an episode are essentially the same as those used in normal operations, except that additional resources shall be drawn upon and emphasis shall be placed upon quick action and rapid response measures.

Upon beginning of mandatory emission reductions during an episode, the patrol and engineering inspectors shall commence 12-hour shifts. Agency personnel normally engaged in activities which can be postponed, e. g., review of permit applications, will be recruited for source surveillance activities unless assigned to other aspects of the episode program. The DAPC and local agencies will experiment with the use of additional measures to increase surveillance during episodes, including such measures as:

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[9] The National Weather Service operates the Weather Service Forecast Office which is responsible for issuing Air Stagnation Advisories for the Air Quality Control Region which includes the State of Alabama.

- Using police and civil defense personnel as patrol inspectors
- Using private pilots on a voluntary basis to spot illegal plumes from the air
- Alerting the public (radio, television) as to visible signs of illegal operations during each episode stage.

During an episode, patrol inspectors will concentrate on spotting visible emissions and external signs of illegal operations. Engineering inspectors will spot check major sources and, as in normal periods, will have full authority to enter the premises of any facility they suspect of illegal activity. Both patrol and engineering inspectors will assume responsibility for following up complaints telephoned into the SEAC. All inspections and plume observations conducted during an episode will be recorded on an abbreviated form, with the exception that observations of illegal activity will be fully documented according to standard operating procedures for later use in court.

The emergency episode source surveillance activities encompass the following.

- Every major[10] point source which has been assigned mandatory emission reduction actions shall be given at least a rudimentary unscheduled inspection at least once per day for every day the episode plan is in force.
- If an episode reaches the emergency stage, every major point source which has been assigned mandatory emission reduction actions shall be fully inspected by an engineering inspector at least once during the episode.

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[10] "Major" refers to a selected group of high emission sources in the region.

- Every emission source larger than five tons per year shall have a simple smoke check at least once per day during each day of the episode.
- Enough additional patrol personnel will be deployed so as to make blatantly illegal activity (e.g., open burning) an unacceptable risk to the potential violator.
- Every major complaint will be investigated within two hours.

In order to expedite the major source surveillance task, each source categorized as a "major" source will be analyzed in advance to determine whether the rudimentary inspection called for in the first item above may be handled by a patrol inspector or whether an engineering inspector is needed. If a patrol inspector is capable of handling the inspection, he will be given an instruction sheet indicating the steps which must be taken to carry out the inspection.

All state and local surveillance forces will be coordinated from the SEAC command post manned by the Abatement Officer.

7.4 DATA HANDLING

A series of standardized forms and charts for recording and displaying incoming data will be utilized during an episode. At the present time, all data operations conducted during an episode will be handled manually. When the DAPC information system becomes computerized, much of the incoming episode information will be immediately coded and transferred to the computer system, where it will activate subroutines and short-circuit many of the laborious manual calculations which will have to be performed at present. However, the lack of reliability of present monitoring equipment makes it highly likely that the initial switch of the data handling operations for episodes from a manual to a computer-based operation will only be a partial one, with the computer augmenting rather than replacing manual operations.

8.0 RULES

Rule 1. DEFINITIONS

- State means the State of Alabama

Rule 2. AIR POLLUTION EMERGENCY

The Director is authorized and empowered to enforce or require enforcement of any parts of the Emergency Episode Plan for Air Pollution Sources in the State of Alabama.

Rule 3. EPISODE CRITERIA

When the Director determines that conditions justify the proclamation of an air pollution episode stage, due to the accumulation of air pollutants in any place within the State, attaining levels which could, if sustained or exceeded, lead to a substantial threat to the health of persons, he shall be guided by the following criteria.

a. Episode stages shall be determined and declared upon the basis of average concentrations recorded at any monitoring station in the State.

b. If contamination and meteorology warrant, any advanced episode stage may be declared by the Director without first declaring a lesser degree of Alert or Watch. The Director shall, at his discretion, declare a lesser stage, the termination or the continuance of the advanced episode stage during such times when contamination and meteorological conditions moderate significantly after an advanced episode stage has been declared.

c. Episode Watch

The Director shall declare an Episode Watch when one or more of the following events take place.

(1) An Atmospheric Stagnation Advisory is issued by the National Weather Service, stating that atmospheric conditions marked by a slow moving high pressure system, light winds, and temperature inversions are expected to affect the State of Alabama or portions thereof for the next 36 hours.

(2) A forecast by local meteorologists that stagnant atmospheric conditions as described above could result in high air pollution levels in Alabama or portions thereof.

(3) Validated reports of abnormally high air pollution measurements, specifically, reaching or exceeding 50 percent of the Alert level (Rule 3d) for at least three consecutive hours at a given locality in the State.

d. Alert

The Director shall declare an Alert when any one of the following pollutant concentrations is measured at any monitoring site, and due to adverse meteorological conditions can be expected to remain at these levels or higher for the next 12 hours or more unless control measures are taken.

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.30 ppm (800 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 3.0 COHS per 1000 linear feet

or measured by Hi Vol (high volume sampler), 24-hour accumulation.

24-hour average, 375 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 0.2

sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 65,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 15 ppm (17 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average, 0.15 ppm (282 $\mu g/m^3$)
or 1-hour average, 0.6 ppm (1130 $\mu g/m^3$)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer or equivalent.

1-hour average, 0.1 ppm (200 $\mu g/m^3$)

e. Warning

A Warning shall be declared by the Director when the concentrations of any of the following air pollutants measured at any monitoring site and due to adverse meteorological conditions can be expected to remain at these levels or higher for the next 12 hours or more unless control measures are taken.

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.6 ppm (1600 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 5.0 COHs per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation:

24-hour average, 625 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 0.8

or sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 261,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 30 ppm (34 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average, 0.30 ppm (565 $\mu g/m^3$)

1-hour average, 1.20 ppm (2260 $\mu g/m^3$)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.40 ppm (800 $\mu g/m^3$)

f. Emergency

When the following concentrations of air pollutants have been reached or due to meteorological conditions can be expected to reach or exceed these levels at any monitoring site in the State for a period of 12 hours or more unless control actions are taken, the Director shall declare an Emergency.

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.8 ppm (2100 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 7.0 COHs per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation

24-hour average, 875 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 1.2

or sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 393,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 40 ppm (46 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average,0.40 ppm (750 $\mu g/m^3$)

1-hour average, 1.50 ppm (3000 $\mu g/m^3$)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.60 ppm (1200 $\mu g/m^3$)

g. Termination

The status reached by application of the Episode Criteria (Rule 3) shall remain in effect until the criteria for that level is no longer met. At such time, the next lower status will be assumed and such changes declared by the Director. Specifically:

(1) When ambient pollutant concentrations fall below the critical levels for the stage, and a downward trend of concentrations is established; and

(2) When meteorological conditions that attended the high concentrations are no longer called for in official weather predictions.

A public declaration will take on of the following forms.

(1) Terminate "Emergency Status," resume "Warning Status" or "Alert Status"; whichever is appropriate.

(2) Terminate "Warning Status," resume "Alert Status" or appropriate stage.

(3) Terminate "Episode Status."

Upon termination of an "Episode Status," the Division of Air Pollution Control will remain on internal "Episode Watch" until a return to normal operation is announced by the Division Director.

h. Status Declaration Authority

The Director, Division of Air Pollution Control, or his duly authorized agent, shall have the authority to make an announcement of internal Episode Watch, and public declarations of Alert, Warning and Emergency Status.

Rule 4. SPECIAL EPISODE CRITERIA

a. The Director shall have the authority to declare episodic conditions when the atmospheric concentration of a single pollutant or that of a specific locality within the State show elevated concentrations.

b. Specific Pollutant Situation

When concentrations of one or two pollutants reach or exceed the defined criteria levels, and concentrations of other pollutants remain substantially below 50 percent of Alert levels, and meteorlogical conditions are such that these specific pollutant concentrations can be expected to remain at the above levels for 12 hours or more or increase unless control action is taken, a Specific Alert, Warning, or Emergency Status shall be declared by the Director, naming the pollutants that meet the respective criteria. In such instances when two such pollutants meet different criteria, the Director shall declare the status for the episode having the higher level, and that an Episode Watch is being maintained on the remaining pollutants.

c. Specific Locality Situation

The Director shall, when high concentrations of one or more pollutants measured at one monitoring site and not others and the effect is judged to originate from an identifiable source near the given site, shall declare the appropriate local Alert, Warning, or Emergency Status for the delineated area and that an Episode Watch is in effect for the remaining portion of the jurisdictional area while meteorological conditions favor the maintenance or increase of said high concentrations for at least 12 hours or more unless control action is taken.

Rule 5. EMISSION REDUCTION PLANS

a. Episode Watch

The Director shall in the case of imminent possibility of an Episode Watch, advise designated (by the Director) pollutant sources of impending emission reduction possibilities. These sources shall take the appropriate preparatory measures as designated by the Director.

b. Total Suspended Particulates (TSP), Alert Status

When the Director declares an Alert Status for particulates, any person responsible for the operation of a source of such pollutants shall taken the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and other facilities not specifically designated by the Director shall be accomplished only between 12:00 p.m. and 4:00 p.m.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and 4:00 p.m.

(4) Industrial batch processes and incinerators shall be reduced to 50 percent or less of normal operation and prepared for shutdown.

c. Total Suspended Particulates, Warning Status

When the Director declares a Warning Status for particulates, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and other facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler landing on fuel-burning equipment,if required, shall be accomplished only between noon and 4:00 p.m. upon approval of the Director.

d. Total Suspended Particulates, Emergency Status

When the Director declares an Emergency Status for particulates, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas in Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediate suspend such operations. The establishments include:

- Wholesale and retail laundries and dry cleaning establishments.
- Beauty shops and other users of electrical or gas driers.
- Bakeries of bread, pastries, pizza, etc.
- Public baths, steam rooms, and heated swimming pools.

(7) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

(8) All outdoor construction and demolition work will be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

(9) All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of particulate emissions to the maximum reasonable extent.

e. Sulfur Dioxide, Alert Status

When the Director declares an Alert Status for sulfur dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be accomplished only between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of coal, heavy oil, or other material that could contain sulfur.

(3) Boiler lancing, where required, will be limited to between noon and 4:00 p.m.

f. Sulfur Dioxide, Warning Status

When the Director declares a Warning Status for sulfur dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and 4:00 p.m. upon approval of the Director, Division of Air Pollution Control.

g. Sulfur Dioxide, Emergency Status

When the Director declares an Emergency Status for sulfur dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostats temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in a single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals,

sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat or hot water are used shall immediately suspend such operations. The establishments include:

  (a) Wholesale and retail laundries and dry cleaning establishments.

  (b) Beauty shops and other users of electrical or gas driers.

  (c) Bakeries of breads, pastries, pizza, etc.

  (d) Public baths, steam rooms, and heated swimming pools.

(7) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

h. Carbon Monoxide, Alert Status

When the Director declares an Alert Status for carbon monoxide, any person responsible for the operation of a source of such air pollutant shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Transit authorities shall operate at peak-hour intervals.

(2) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

(3) Sightseeing tours shall be cancelled.

(4) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(5) The public shall make every effort to avoid downtown areas where concentrations of carbon monoxide are highest.

i. Carbon Monoxide, Warning Status

When the Director declares a Warning Status for carbon monoxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Passenger vehicles entering or operating in the center city area shall be restricted to those carrying four or more persons, except for outbound vehicles that have discharged passengers within the restricted area. The center city area shall be defined by the Director.

(2) The public shall be notified in advance by news media that no automobile or truck traffic will be permitted within the center city area, as defined, if and when an Emergency Status for carbon monoxide is declared.

(3) Designated principal avenues shall be made one-way outbound from the center city area. These shall be designated by the Director.

j. Carbon Monoxide, Emergency Status

When the Director declares an Emergency Status for carbon monoxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) No automobile or truck traffic shall be permitted within the center city area except for designated emergency vehicles.

(2) All unnecessary use of vehicles shall be prohibited throughout the remainder of affected urban areas.

(3) Idling of vehicle engines while the vehicles are parked shall be prohibited.

(4) All stores shall be closed except for those engaged in the sale of food and medicines.

(5) Through bus and truck service shall be rerouted to avoid the center city.

(6) Scheduled bus service shall be curtailed.

(7) Scheduled flights originating at Birmingham Airport shall be cancelled. Flights scheduled to terminate at Birmingham Airport shall be diverted to alternate airports.

k. Nitrogen Dioxide, Alert Status

When the Director declares an Alert Status for nitrogen dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be accomplished only between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m.

(4) The public transportation interests shall be notified and requested to plan for measures that will be initiated if the Warning Status for nitrogen dioxide is declared. Specifically:

  (a) Transit authorities shall plan for peak-hour operations.

  (b) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

  (c) Sightseeing tours shall be advised to reduce activity in preparation for possible cancellation.

  (d) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

  (e) The public shall make every effort to avoid the normal boundaries of city downtown areas where concentrations of nitrogen dioxide tend to be highest.

l. Nitrogen Dioxide, Warning Status

When the Director declares a Warning Status for nitrogen dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m. upon approval of the Director.

(4) Transit authorities shall initiate peak-hour operations.

(5) Passenger vehicles entering or operating in the center city area shall be restricted to those carrying four or more persons, except for outbound vehicles that have discharged passengers within the restricted area. The center city shall be defined by the Director.

(6) No automobile or truck traffic shall be permitted within the center city area, as defined.

(7) Sightseeing tours shall be cancelled.

(8) Employees of all government offices - federal, state, and municipal - shall be dismissed early on a staggered basis. Private companies shall do likewise.

(9) Designated principal avenues shall be made one-way outbound from the center city area, as defined by the Director.

m. Nitrogen Dioxide, Emergency Status

When the Director declares an Emergency Status for nitrogen dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

   (a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediately suspend such operations. The establishments include:

  (a) Wholesale and retail laundries and dry cleaning establishments.

  (b) Beauty shops and other users of electrical or gas driers.

  (c) Bakeries of bread, pastries, pizza, etc.

(7) All stores shall be closed except for those engaged in the sale of food and medicines.

(8) All outdoor construction and demolition work shall be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

(9) All commercial and manufacturing establishments not specifically mentioned in this order shall institute such actions as will result in reduction of nitrogen dioxide emissions to the maximum reasonable extent.

(10) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

(11) No automobile or truck traffic shall be permitted within the center city area except for designated emergency vehicles.

(12) Unnecessary use of vehicles shall be prohibited throughout the remainder of the affected areas in Alabama.

(13) Idling of vehicle engines while the vehicles are parked shall be prohibited.

(14) Through bus and truck service shall be rerouted to avoid the center city area.

(15) Scheduled bus services shall be curtailed in accordance with prearranged plans.

(16) Scheduled flights originating at Birmingham Airport shall be cancelled. Flights scheduled to terminate at Birmingham Airport shall be diverted to an alternate airport outside the affected area.

n. Photochemical Oxidants, Alert Status

When the Director declares an Alert Status for photochemical oxidants, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be accomplished between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m.

(4) The public transportation interests shall be notified and requested to plan for measures that shall be initiated if the Warning Status for photochemical oxidants is declared. Specifically.

   (a) Transit authorities shall plan for peak-hour operations.

   (b) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

   (c) Sightseeing tours shall reduce activity in preparation for possible cancellation.

   (d) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(5) Fuel oil companies serving domestic users shall plan on cancelling deliveries if and when a Warning Status for photochemical oxidants is declared.

(6) Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, shall be reduced by 50 percent of normal amounts.

(7) Transfer of aviation fuel to tank trucks from storage tanks at airports shall be permitted.

o. Photochemical Oxidants, Warning Status

When the Director declares A Warning Status for photochemical oxidants, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m. upon approval of the Director.

(4) Transit authorities shall initiate peak-hour operations.

(5) Sightseeing tours shall be cancelled.

(6) Employees of all government offices - federal, state and municipal - shall be dismissed early on a staggered basis. Private companies shall do likewise.

(7) All schools and universities shall be closed, and all available school buses shall supplement regular public transit buses in accordance with prearranged plans.

(8) Two hours after the Warning Status has been declared with a forecast to continue, all parking meter violations and restrictions to on-street parking shall be suspended.

(9) Taxi cruising shall be prohibited in all parts of the city.

(10) All deliveries and refuse collecting shall be curtailed.

(11) Sales of gasoline and diesel oil at service stations shall be limited to five gallons per vehicle. However, the public will be urged to use vehicles only to reach their intended parking places for the duration of the episode.

(12) Fuel oil deliveries to all users shall be suspended, except to hospitals, sanatoriums, children's homes, homes for the aged and infirm, and special cases approved by the Director, Alabama Department of Health.

(13) Aircraft scheduled to terminate their flights at Birmingham Airport shall be diverted to an alternate airport outside the affected area.

(14) Aircraft departures from Birmingham Airport shall be separated by minimum time intervals of seven minutes.

(15) Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, shall be reduced to 25 percent of normal amounts, or less.

(16) Run-ups of aircraft engines undergoing maintenance or repair shall be prohibited.

(17) All unnecessary transfer of aviation fuel to tank trucks from storage tanks at airports shall be prohibited.

p. Photochemical Oxidants, Emergency Status

When the Director declares an Emergency Status for photochemical oxidants, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediately suspend such operations. The establishments include:

(a) Wholesale and retail laundries and dry cleaning establishments.

(b) Beauty shops and other users of electrical or gas driers.

(c) Bakeries of breads, pastries, pizza, etc.

(d) Public baths, steam rooms, and heated swimming pools.

(7) All stores will be closed except for those engaged in the sale of food and medicines.

(8) All outdoor construction and demolition work shall be suspended until episode termination, except for work that if left unfinished, might result in a public hazard.

(9) All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of nitrogen oxides and hydrocarbon emissions to the maximum reasonable extent.

(10) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

(11) All unnecessary use of vehicles shall be prohibited throughout all of the affected areas of Alabama.

(12) Idling of vehicle engines while the vehicles are parked shall be prohibited.

(13) Through bus and truck service will be rerouted to highways outside the affected areas in Alabama.

(14) Scheduled bus service shall be curtailed in accordance with prearranged plans.

(15) Scheduled flights originating at Birmingham shall be cancelled. Flights scheduled to terminate at Birmingham Airport shall be diverted to alternate airports outside the affected areas.

(16) Aircraft departures for through flights shall be separated by minimum time intervals of 15 minutes at Birmingham Airport and 10 minutes at Mobile Airport.

(17) All unnecessary transfer of aviation fuel to tank trucks at airports shall be prohibited.

(18) Run-ups of aircraft engines undergoing maintenance or repair shall be prohibited.

(19) Sales of gasoline and diesel oil at service stations shall be prohibited.

(20) Fuel oil deliveries to hospitals, sanatoriums, children's homes, homes for the aged and infirm, and special cases approved by the Director, Alabama Department of Health, shall be made only in response to emergency calls. Fuel oil deliveries to all other users shall be suspended.

Rule 6. EMISSION REDUCTION PLANS FOR TWO POLLUTANTS

a. The Director shall declare an Alert, Warning, or Emergency Status specific for two pollutants when the ambient concentrations of two pollutants simultaneously reach or exceed their respective Episode Criteria and meteorological conditions are such that pollutant concentrations can be expected to remain at those criteria levels for 12 or more hours or increase unless control actions are taken. When criteria levels correspond to different episode status for two pollutants, the Director shall declare the status of the higher of the two and any person responsible for the operation of a source of such air pollutants shall take the general measures of Rule 5, and specific source curtailments as designated by the Director.

b. When the action specified for one or two pollutants causes an increase rather than a decrease of emissions of the remaining pollutant, it will not be executed. The actions to be taken in such cases are described in Rule 7.

Rule 7. EMISSION REDUCTION PLANS FOR GENERAL EPISODES

The Director shall, in the event that ambient concentrations of three or more pollutants simultaneously reach or exceed their respective Episode Criteria and no improvement in meteorological conditions is forecast for the next 12 hours, declare a General Alert, Warning, or Emergency Status. In the event the crteria levels correspond to different statuses for each pollutant, the Director shall declare a general status corresponding to the highest individual status.

a. General Alert Status

When the Director declares a General Alert Status, any person responsible for the operation of a source of air pollutants shall take the following general measures and all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and other industrial facilities not specifically designated by the Director shall be accomplished only between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and and 4:00 p.m.

(4) Transit authorities shall initiate peak-hour operations.

(5) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

(6) Sightseeing tours will be cancelled.

(7) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(8) The public shall make every effort to avoid downtown boundaries of affected cities in Alabama where pollutant concentrations are highest. The center city boundaries shall be defined by the Director.

(9) Gasoline and diesel oil deliveries to service stations shall be curtailed.

(10) Fuel oil deliveries to industrial users shall be curtailed.

(11) Fuel oil companies serving domestic users shall be advised through news media to plan on cancelling deliveries if and when a general Warning Status is declared.

(12) Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, shall be reduced by 50 percent of normal amounts.

(13) Transfer of aviation fuel to tank trucks from storage tanks at airports shall be permitted.

b. General Warning Status

When the Director declares a General Warning Status, any person responsible for the operation of a source of air pollutants shall take the following general measures and all specific source curtailments designated by the Director:

(1) Solid waste incineration from all office buildings, apartment houses, and other industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing and soot blowing, where required, shall be limited to between noon and 4:00 p.m. upon approval of the Director.

(4) Passenger vehicles entering or operating in the center city area shall be restricted to those carrying four or more persons except for outbound vehicles that have discharged passengers within the restricted area.

(5) No automobile or truck traffic shall be permitted within the center city area, as defined.

(6) Designated principal avenues shall be made one-way outbound from center city. The principal avenues shall be designated by the Director.

(7) All schools and universities shall be closed, and all available school buses shall supplement regular public transit buses in accordance with prearranged plans.

(8) Two hours after the Warning Status has been declared, and is forecast to continue, all parking meter violations and restrictions to on-street parking shall be suspended.

(9) Staggered work hours shall be in effect in all government offices - federal, state, and municipal - and in privates offices as well.

(10) Taxi cruising shall be prohibited in all parts of Anniston, Birmingham, and Mobile.

(11) All deliveries and refuse collecting shall be curtailed.

(12) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(13) Sales of gasoline and diesel oil at service stations shall be limited to five gallons per vehicle. However, the public shall be urged to use vehicles only to reach their intended parking places for the duration of the episode.

c. General Emergency Status

When the Director declares a General Emergency Status, any person responsible for the operation of a source of air pollutants shall take the following general measures and all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous materials storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family (six-family units or or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediately suspend such operations. The establishments include:

  (a) Wholesale and reail laundries and dry cleaning establishments.

  (b) Beauty shops and other users of electrical or gas driers.

  (c) Bakeries of breads, pastries, pizza, etc.

  (d) Public baths, steam rooms, and heated swimming pools.

(7) All outdoor construction and demolition work shall be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

(8) All commercial and manufacturing establishments not specifically mentioned in this order shall institute such actions as will result in reduction of pollutant emissions to the maximum reasonable extent.

(9) All stores shall be closed except for those engaged in the sale of food and medicines.

Rule 8. EMISSION REDUCTION PLAN FOR LOCAL EPISODES (See Rule 3c)

a. The Director shall specify the area of the State affected when a Local Alert, Warning or Emergency Status is declared, or when an Accidental Episode for Common Pollutants occurs, based upon air quality and meteorological reports and predictions.

b. When the Director declares such a local episode, any person responsible for the operation from which excess emissions results, shall shut down such an operation and make repairs or alter the process as required to restore normal operations.

c. When the Director declares that a Local Alert, Warning, or Emergency STatus is in effect for a delineated area, corresponding General Measures shall be applied as detailed in Rule 3, depending upon which pollutant(s) is/are being emitted in excess.

Rule 9. EMISSION REDUCTION PLANS FOR OTHER SOURCES

a. Any person responsible for the operation of a source of air pollutants as determined by the Director shall prepare standby plans for reducing the emissions of air pollutants during periods of an Episode Alert, Warning, and Emergency. Standby plans shall be designed to reduce or eliminate emissions of air pollutants in accordance with the objectives set forth in Rule 3.

b. Any person responsible for the operation of a source of air pollutants not designated by the Director shall when requested by the Director in writing, prepare standby plans for reducing the emission of air pollutants during periods of Episode Alert, Warning, and Emergency. Standby plans shall be designed to reduce or eliminate emissions of air pollutants in accordance with the objectives set forth in Rule 3.

c. Standby plans as required under Rule 9a shall be in writing and identify the sources of air pollutants, the amount of reduction of pollutants and a brief description of the manner in which reduction will be achieved during Episodes of Alert, Warning, and Emergency.

d. During Episodes of Alert, Warning, and Emergency Status,standby plans as required by this regulation shall be made available on the premises to any person authorized to enforce the provisions of applicable rules and regulations.

e. Standby plans as required by these rules and regulations shall be submitted to the Director of the Division of Air Pollution Control, State of Alabama, upon request within 3[illegible] days of the recept of such request; such standby plans shall be subject to review and approval by the Director. If in the opinion of the Director, a standby plan does not effectively carry out the objectives as set forth in these rules and regulations, the Director may disapprove it, state the reason for disapproval and order the preparation of an amended standby plan within the time period specified in the order.

APPENDIX A

STATE OF ALABAMA

AIR POLLUTION EPISODE CONTROL COMMUNICATIONS MANUAL

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1.0 EPISODE COMMUNICATIONS MANUAL

This manual provides a communications checklist for all communications required for each stage of an air pollution episode in the State of Alabama and a directory of additional contacts appropriate for specified affected regions. Sample declaration sheets for each episode stage are also included. These forms are available at the State Emergency Action Center.

1.1 EPISODE LOGBOOK

An Episode Logbook is maintained by the SEAC. This logbook contains the declaration sheets and communications checklists for each stage of an episode providing a formal record of the actions taken during each stage. In addition to these items, logbook entries include reports of high pollutant levels, Atmospheric Stagnation Advisories, local forecasts of episode-potential meteorological conditions, and all pertinent developments at the SEAC when full activation is in effect. The logbook is to be available for post-episode analysis, legal actions, and other authorized uses.

1.2 DECLARATION SHEETS

There is a declaration sheet for each stage of the episode plan. The sheet is filled out by the coordinating engineer on duty at the emergency action center. When an episode stage is declared, a "declaration statement" is recorded on the declaration sheet. The declaration statement contains concise information on the air quality, the region affected, and the meteorological forecast and is the basic information to be communicated to each of the contacts listed on the communications checklists. This statement is made available to persons responsible for making the requirement communications and the declaration sheet is then posted in the SEAC providing an easily accessible status report to the staff and other interested parties.

The declaration statement is also read over the telephone to the listed news media with the State of Alabama for dissemination to the general public.

If circumstances warrant, special press releases may be issued to news media representatives at the SEAC, and it may be appropriate to hold briefings for various media representatives.

If a higher episode status or termination status is declared, a final entry to this effect is made on the current declaration sheet, which is then removed from display and filed in the Episode Logbook. A new declaration sheet is initiated for each episode status and the current declaration sheet is posted on the display board until superceded by a new episode status.

1.3 COMMUNICATIONS CHECKLIST

A separate communications checklist is utilized for recording contacts made during each episode stage. Each person on the checklist will be contacted by telephone from the SEAC and read the declaration statement. The person making the contact will note the time of the call on the checklist and will initial it. Further information will be given, where appropriate, and recorded on the back of the form with a reference made to the appropriate listing(s).

Other contacts may be appropriate depending on the region affected. The telephone numbers for these additional contacts are found in the Directory of Additional Contacts. These contacts, when made, will be noted at the botton of the checklist sheet. When all contacts have been completed, the checklist will be filed in the Episode Logbook with the applicable declaration sheet.

Sample forms and communications checklists are provided for reference purposes in the following pages in the order listed below.

- Directory of Additional Contacts
- Meteorological Advisory Form
- Meteorological Information Form
- WATCH Declaration Sheet
- Communications Checklist, Episode WATCH Stage Notifications
- ALERT Declaration Sheet
- Communications Checklist, Episode ALERT Stage Notifications
- WARNING Declaration Sheet
- Communications Checklist, Episode WARNING Stage Notifications
- EMERGENCY Declaration Sheet
- Communications Checklist, Episode EMERGENCY Stage Notifications

Directory

State of Alabama

Division of Air Pollution Control	
Office of the Director	(205) 269-7634
Laboratory	(205) 269-7213

EPA

EOCC - Research Triangle Park, N. C.	(919)
Atlanta Regional Office	

Birmingham

Department of Inspection Services, Smoke Abatement Division	(205) 252-0252

Huntsville

Air Pollution Control Department	(205) 539-9612, Ext. 373

Jefferson County

Jefferson Co. Department of Health	(205) 324-9571

Mobile County

Mobile Co. Board of Health	(205) 432-1631

Weather Service Forecast Office

State Dial Center	(205) 325-3011
Direct FTS	(205) 325-3689
Commercial	(205) 595-8311

Meteorological Advisory

National Weather Service Advisory:____

____

____

____

____

____

____

Received by: Name________________________

Date__________Time____________

Areas Affected:____

____

____

____

____

Meteorological Information

Request to:____________________

By:___________________________

Date:________Time___________

Purpose:____

Response:____

WATCH Declaration Sheet

Area Affected:____________________

Prior Level: Surveillance Alert

Pollutant(s): Particulate SO_2 NO_2 CO Oxidant General

Air Quality Data Summary:____

____

____

____

Meteorological Summary:____

____

____

Other:____

____

WATCH
Conditions Met: Date_______ Time_______ ________________________
(Signed)

WATCH
Authorized: Date_______ Time_______

By: ____
(Director, Division of Air Pollution Control)

To be in effect until___________________

SURVEILLANCE_____or ALERT_____Declared: Date _______

Time_______

WATCH Declaration Statement:

COMMUNICATIONS CHECKLIST

Episode WATCH Stage Notifications

Declared: Date_________ Time _________

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Chairman, Air Pollution Control Commission I. L. Myers, M. D.	269-7701	272-0827		
Director, Bureau of Environmental Health A. N. Beck	269-7632	263-4852		
Director, Air Pollution Control Commision W. T. Willis	269-7634	272-2095		
OAP-ATLANTA Region IV Director G. B. Welsh	(404) 526-3043	(404) 289-5153		
OAP-North Carolina D. Tyler	(919) 549-8411	(919) 498-8810		
	For Intrastate Regions			
Jefferson County Health Department G. Hardy, M. D.	324-9571 X 308	871-7102		
Jefferson County Health Department B. Robison	324-9571 X 209	786-7450		
	For Interstate Regions			
Mobile Office of Mayor R. B. Doyle, Jr.	438-7431	342-6153		
Mobile County Health Department G. Newburn, M. D.	432-1631 X 32	861-3627		
Mobile County Health Department J. Fibbe	432-1631 X 61	471-3684		

*Assumed to be Area Code 205 unless otherwise specified.

COMMUNICATIONS CHECKLIST

Episode WATCH Stage Notifications

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Florida State Health Department V. D. Patton	(904) 224-9151	(904) 385-7349		
Georgia State Health Department R. H. Collom	(404) 656-4867	(404) 443-6153		
Mississippi State Health Department J. H. Curry	(601) 354-6783	(601) 982-3003		
Tennessee State Health Department H. Hodges	(615) 741-2061	(615) 868-3016		
Associated Press				
Birmingham H. G. Harwell	323-5388	822-6447		
Mobile S. W. Atkins	433-1551	478-4442		
Montgomery R. N. Thomas	262-5947			
United Press International				
Birmingham L. C. Falk	322-2780	967-4962		
Mobile B. W. Parker	433-2330	432-0102		
Montgomery B. L. Ford	262-1951	265-3453		

Sources

Select appropriate Pollutant Episode Plan(s), which are required for a pollutant or combination of pollutants, in the affected region(s) or area(s) and make the necessary contacts as listed in Table 3-1 of the Emergency Episode Plan for Air Pollution Sources in the State of Alabama.

*Assumed to be Area Code 205 unless otherwise specified.

ALERT Declaration Sheet

Area Affected:__________________

Prior Level: Watch Warning

Pollutant(s): **Particulate SO_2 NO_2 CO Oxidant General**

Air Quality Data Summary:____

Meteorological Summary:____

Other:____

ALERT
Conditions Met: Date_______ **Time**_______ ____________________
(Signed)

ALERT
Authorized: Date_______ **Time**_______

By: ____________________________________
(Director, Division of Air Pollution Control)

To be in effect until__________________

WATCH______ or WARNING______ Declared: Date _______
Time_______

ALERT Declaration Statement:

COMMUNICATIONS CHECKLIST

Episode ALERT Stage Notifications

Declared: Date________ Time ________

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Chairman, Air Pollution Control Commission I. L. Myers, M. D.	269-7701	272-0827		
Director, Bureau of Environmental Health A. N. Beck	269-7632	263-4852		
Director, Air Pollution Control Commision W. T. Willis	269-7634	272-2095		
OAP-ATLANTA Region IV Director G. B. Welsh	(404) 526-3043	(404) 289-5153		
OAP-North Carolina D. Tyler	(919) 549-8411	(919) 498-8810		
	For Intrastate Regions			
Jefferson County Health Department G. Hardy, M. D.	324-9571 X 308	871-7102		
Jefferson County Health Department B. Robinson	324-9571 X 209	786-7450		
	For Interstate Regions			
Mobile Office of Mayor R. B. Doyle, Jr.	438-7431	342-6153		
Mobile County Health Department G. Newburn, M. D.	432-1631 X 32	861-3627		
Mobile County Health Department J. Fibbe	432-1631 X 61	471-3684		

*Assumed to be Area Code 205 unless otherwise specified.

Page 2 of 2

COMMUNICATIONS CHECKLIST
Episode ALERT Stage Notifications

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Florida State Health Department V. D. Patton	(904) 224-9151	(904) 385-7349		
Georgia State Health Department R. H. Collom	(404) 656-4867	(404) 443-6153		
Mississippi State Health Department J. H. Curry	(601) 354-6783	(601) 982-3003		
Tennessee State Health Department H. Hodges	(615) 741-2061	(615) 868-3016		
Associated Press				
Birmingham H. G. Harwell	323-5388	822-6447		
Mobile S. W. Atkins	433-1551	478-4442		
Montgomery R. N. Thomas	262-5947			
United Press International				
Birmingham L. C. Falk	322-2780	967-4962		
Mobile B. W. Parker	433-2330	432-0102		
Montgomery B. L. Ford	262-1951	265-3453		

Sources

Select appropriate Pollutant Episode Plan(s), which are required for a pollutant or combination of pollutants, in the affected region(s) or area(s) and make the necessary contacts as listed in Table 3-1 of the Emergency Episode Plan for Air Pollution Sources in the State of Alabama.

*Assumed to be Area Code 205 unless otherwise specified.

WARNING Declaration Sheet

Area Affected:____________________

Prior Level: Alert Emergency

Pollutant(s): Particulate SO_2 NO_2 CO Oxidant General

Air Quality Data Summary:____

____

____

____

Meteorological Summary:____

____

____

Other:____

____

WARNING Conditions Met: **Date**_______ **Time**_______ ________________________
(Signed)

WARNING Authorized: **Date**_______ **Time**_______

By: ____
(Director, Division of Air Pollution Control)

To be in effect until____________________

ALERT_______ or Emergency_______ Declared: **Date** _______
Time_______

WARNING Declaration Statement:

Page 1 Of 2

COMMUNICATIONS CHECKLIST

Episode WARNING Stage Notifications

Declared: Date________ Time ________

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Chairman, Air Pollution Control Commission I. L. Myers, M. D.	269-7701	272-0827		
Director, Bureau of Environmental Health A. N. Beck	269-7632	263-4852		
Director, Air Pollution Control Commision W. T. Willis	269-7634	272-2095		
OAP-ATLANTA Region IV Director G. B. Welsh	(404) 526-3043	(404) 289-5153		
OAP-North Carolina D. Tyler	(919) 549-8411	(919) 498-8810		
	For Intrastate Regions			
Jefferson County Health Department G. Hardy, M. D.	324-9571 X 308	871-7102		
Jefferson County Health Department B. Robinson	324-9571 X 209	786-7450		
	For Interstate Regions			
Mobile Office of Mayor R. B. Doyle, Jr.	438-7431	342-6153		
Mobile County Health Department G. Newburn, M. D.	432-1631 X 32	861-3627		
Mobile County Health Department J. Fibbe	432-1631 X 61	471-3684		

*Assumed to be Area Code 205 unless otherwise specified.

COMMUNICATIONS CHECKLIST

Episode WARNING Stage Notifications

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Florida State Health Department V. D. Patton	(904) 224-9151	(904) 385-7349		
Georgia State Health Department R. H. Collom	(404) 656-4867	(404) 443-6153		
Mississippi State Health Department J. H. Curry	(601) 354-6783	(601) 982-3003		
Tennessee State Health Department H. Hodges	(615) 741-2061	(615) 868-3016		
Associated Press				
Birmingham H. G. Harwell	323-5388	822-6447		
Mobile S. W. Atkins	433-1551	478-4442		
Montgomery R. N. Thomas	262-5947			
United Press International				
Birmingham L. C. Falk	322-2780	967-4962		
Mobile B. W. Parker	433-2330	432-0102		
Montgomery B. L. Ford	262-1951	265-3453		

Sources

Select appropriate Pollutant Episode Plan(s), which are required for a pollutant or combination of pollutants, in the affected region(s) or area(s) and make the necessary contacts as listed in Table 3-1 of the Emergency Episode Plan for Air Pollution Sources in the State of Alabama.

*Assumed to be Area Code 205 unless otherwise specified.

EMERGENCY Declaration Sheet

Area Affected:____________________

Pollutant(s): Particulate SO_2 NO_2 CO Oxidant General

Air Quality Data Summary:____

____

____

____

Meteorological Summary:____

____

____

Other:____

____

EMERGENCY
Conditions Met: Date_______ Time_______ ________________________
(Signed)

EMERGENCY
Authorized: Date_______ Time_______

By: ____
(Director, Division of Air Pollution Control)

To be in effect until____________________

WARNING_______ Declared: Date _______

Time_______

EMERGENCY Declaration Statement:

Page 1 Of 2

COMMUNICATIONS CHECKLIST

Episode EMERGENCY Stage Notifications

Declared: Date_________ Time _________

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Chairman, Air Pollution Control Commission I. L. Myers, M. D.	269-7701	272-0827		
Director, Bureau of Environmental Health A. N. Beck	269-7632	263-4852		
Director, Air Pollution Control Commision W. T. Willis	269-7634	272-2095		
OAP-ATLANTA Region IV Director G. B. Welsh	(404) 526-3043	(404) 289-5153		
OAP-North Carolina D. Tyler	(919) 549-8411	(919) 498-8810		

For Intrastate Regions

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Jefferson County Health Department G. Hardy, M. D.	324-9571 X 308	871-7102		
Jefferson County Health Department B. Robinson	324-9571 X 209	786-7450		

For Interstate Regions

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Mobile Office of Mayor R. B. Doyle, Jr.	438-7431	342-6153		
Mobile County Health Department G. Newburn, M. D.	432-1631 X 32	861-3627		
Mobile County Health Department J. Fibbe	432-1631 X 61	471-3684		

*Assumed to be Area Code 205 unless otherwise specified.

COMMUNICATIONS CHECKLIST

Episode EMERGENCY Stage Notifications

Contact	Business* Telephone Number	Home* Telephone Number	Called By (Initials)	Time
Florida State Health Department V. D. Patton	(904) 224-9151	(904) 385-7349		
Georgia State Health Department R. H. Collom	(404) 656-4867	(404) 443-6153		
Mississippi State Health Department J. H. Curry	(601) 354-6783	(601) 982-3003		
Tennessee State Health Department H. Hodges	(615) 741-2061	(615) 868-3016		
Associated Press				
Birmingham H. G. Harwell	323-5388	822-6447		
Mobile S. W. Atkins	433-1551	478-4442		
Montgomery R. N. Thomas	262-5947			
United Press International				
Birmingham L. C. Falk	322-2780	967-4962		
Mobile B. W. Parker	433-2330	432-0102		
Montgomery B. L. Ford	262-1951	265-3453		

Sources

Select appropriate Pollutant Episode Plan(s), which are required for a pollutant or combination of pollutants, in the affected region(s) or area(s) and make the necessary contacts as listed in Table 3-1 of the Emergency Episode Plan for Air Pollution Sources in the State of Alabama.

*Assumed to be Area Code 205 unless otherwise specified.